ON SCENE

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ON SCENE

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COVER: 47' MLB in Action

ON SCENE is a quarterly, authorized, special interest publication, produced by the Office of Navigation Safety and Waterway Services for members of the U.S. Coast Guard and the SAR community. Editorial content is not to be considered as authority for official action, nor as record material. Individual views and opinions expressed do not necessarily reflect those of the Department of Transportation or the U. S. Coast Guard.

CHIEF, OFFICE OF NAVIGATION SAFETY
AND WATERWAY SERVICES
UNITED STATES COAST GUARD
WASHINGTON, D.C. 20593-0001

Dear "On Scene" Readers,

I am pleased to address you as the new Chief of the Office of Navigation Safety and Waterway Services, and I look forward to working with all of you in the challenging arena of Search and Rescue.

In the short period of time that I have held this position, I have been continuously reminded of the extraordinary performance of duty by Coast Guard men and women, Regulars, Reserves and Auxiliary, executing the various missions within the purview of this office. This is certainly true of those involved in the Search and Rescue program, as demonstrated dramatically by the many east coast units who responded to calls for assistance in the aftermath of the "Northeaster" that passed inside of Hurricane Bob.

These incidents underscore vividly the importance of **communications.** Whether it is dealing with a distressed mariner, passing vital information to a SAR unit, or telling superiors of ongoing difficulties, it is vital that communications are conducted clearly, calmly and in a common vocabulary. It matters not that the equipment may be technologically superior, if the message cannot be understood the first time it is transmitted.

Communicating is a skill that must be practiced and developed by everyone, whether he or she serves as a station watchstander or is the District Commander. An important element of communications is the ability to listen in an understanding and supportive manner. Give some conscious thought to improving your communications expertise as you go about performing your daily tasks. Reflect and grade yourself once a week. It works!

Sincerely,

W. J. ECKER
Rear Admiral, U.S. Coast Guard

Letters to the Editor

Dear ON SCENE Editor,

Reference page 23 of the 2/91 issue of On Scene. I do not believe todays emphasis on multi-mission responsibilities will enable the Coast Guard to "reduce" a station's operational workload. Was the study generated to placate the field CO/OINC and make us feel or think "something is being done?" It appears the movers are using this opportunity to solve/resolve other organizationally generated problems (OGP). Whatever happened to the problem question or statement? THE OLD STANDARDS DO NOT REFLECT THE NEED OF TODAY'S STATIONS. The point here is: Give us additional funds, a couple more people or an SK. I feel the Commander is in error when he states "one can't ask for anything more." Todays stations NEED MORE. There is more to do. There is only one way to decrease paperwork...eliminate the generators. More money, more people, and less bureaucracy.

BMC F. A. Amos
OINC, Station LA/LB

Dear On Scene Editor,

This is in response to the 2/91 issue of On Scene article entitled "44ft Motor Lifeboat Report Card" by the MLB Standardization Team Staff.

Since when is training EPOs a responsibility of group engineers? Guiding, assisting, and supporting yes; but not training.

Let's take a look at the whole EPO assignment process from the viewpoint of that MK who wants to be an EPO. We'll start with 4-C-34 of the Personnel Manual, which states, "EPO assignments require a special selection procedure because of the particularly high degree of leadership, performance, **professional competence**, and **skill** required for the job. **Proper background experience**, maturity, dedication, and professionalism are requisite qualifications for EPO" (emphasis added). Sounds to me like an EPO should arrive on the job pretty well trained already! So, who ensures that you, the aspiring MK, have these qualifications before you are assigned as EPO?

First, you do! It starts with you, so prepare yourself for the job. That means more than just learning how to turn a wrench. Dig into the Naval Engineering Manual; it's your bible. Look through the MLC SOP. Get familiar with the BOSS Manual and all the other technical publications that relate to being an EPO. A good EPO knows where to find the answers, and does some homework before hollering for help. Read your trade journals; On Scene, MLC Naval Notes, the newsletters from the Stan Teams, and all those other bulletins put out by the engineering, operations, and supply folks that give you the information that makes you an informed engineer. If you do this, you've demonstrated several of the necessary personal

qualities mentioned previously and are well on the way to being qualified for an EPO billet. Then you must request the assignment. If you are honest, you will measure your abilities against the job requirements, and not apply if you can't live up to them.

Second, your command gets involved. The CO/OinC must endorse your request, assessing "leadership required for independent duty, **technical competence required for the job**, maturity, dedication, professionalism, and military bearing/appearance." Your CO is probably going to turn to your EPO for advice. It's part of your EPO's job to teach you how to be a good engineer; to train you for an EPO job. If you've prepared yourself in the manner I mentioned earlier, your EPO will most likely already be giving you the additional training you need, and you should get a positive endorsement. If you haven't prepared, then you shouldn't expect one.

Then, G-PE (the detailer) reviews all this information and makes assignments based on Service needs using the best qualified personnel available, "based on past performance, CO's endorsement, **qualification codes, career experience**, and personal preference." If you've done your part, and so has your EPO, then the detailer's job is relatively easy. He or she will find you an EPO billet. You will arrive at that station with the background needed to be a good EPO, and nobody has to train you!

It seems like we shouldn't have any problems. Only qualified, experienced people can be assigned as EPOs and very little training should be needed. Unfortunately, this is not the case. Let's look again in 4-C-34 of the PERSMAN. It states, "Should the total number of EPO billets available exceed the number of requests on file, Commandant (G-PE) will make assignments based on Service needs using the best qualified personnel available." Based on the MLB Stan Team's report, it appears that there are many EPOs assigned who don't meet the standards of the Personnel Manual. We have failed to "groom" our MKs for station EPO jobs and there just aren't enough qualified people to fill all the billets.

Given the reality of the situation, who then provides the training to those EPOs who need it? The MLB Stan Team article says the group engineer should. But is that really the solution? A phone call to G-PO revealed that there are NO qualification requirements for assignment as a group engineer. There are some assignment policies the detailer tries to follow, such as not sending new appointees to warrant grade or anyone who has bad OERs as a group engineer, but there is no disqualification based on lack of experience with small boats. Don't get me wrong: we have plenty of good warrant engineers in the Coast Guard who do an excellent job at groups. G-PO's statistics show that 82% of the group engineers have prior group or station assignments, and the majority of the remaining 18% are senior W4's with a lot of experience. Even so, they may still lack the experience necessary to make them trainers of station EPOs. Besides, they also suffer from the same problems as the EPOs: they are "overwhelmed with numerous responsibilities unrelated to boat maintenance," such as WPB and ANT support, hazmat, safety, shore plant maintenance, and so on. Also, they too are often understaffed. It should not fall on the group engineers to train EPOs; they are overworked and may be undertrained themselves.

Then who is going to train these unqualified EPOs? I recommend that it start where it should have, with the EPOs themselves. They've got to dig into the manuals, read the newsletters, and learn what's happening in their field. They've got to get qualified as boat engineers; become familiar with all the engineering jobs at the station. They need to go to school; Engineering Admin, MLB Supervisor, etc. Their commands have to be supportive of this; even insistent if the EPO is reluctant. And the group engineer should be involved; guiding, assisting, and supporting as I said before. But, the burden of the training must fall on the EPOs themselves.

In the meantime, the Coast Guard should be working at solving the root problem of inadequate training of our people. Instruction from the experts is critical. We must place greater emphasis on such courses as the MLB Supervisor Course at NMLBS. Maybe bring back the Engineering Supervisor Course. Institute similar courses run by the UTB Systems Center for the 41's. Conduct more training during Standardization Team visits. Heck, place more emphasis on Standardization Teams, period. They are invaluable in curing the problems described in the article. What we can't afford to do is improve one situation at the expense of another. Don't just dump the problem of untrained EPOs on the group engineers!

I hold great hope that the Small Boat Station Staffing Study will result in some major changes for the stations so that they will get qualified people

assigned who are not overwhelmed with work to the extent that they can't do their primary job. I hope that training opportunities increase and that the Standardization Teams get beefed up to champion an increase in professionalism. I also hope that it will be just the beginning and that the Group Study will result in similar changes that define and implement a reasonable work description for groups. In the meantime, we all need to do what we can to improve those things within our own capabilities; to be part of the solution instead of the problem.

CDR W. M. BANNISTER
G-CPP

Dear On Scene Editor,

Reporting Parties on land report many distresses on the water. However, getting an accurate position of the distress can be very difficult (especially if the distress happens quickly, i.e. a flare). A Reporting Party on land can provide better information if they use a temporary range to mark the distress. Using the temporary range provides one line of position allowing the Reporting Party to accurately direct SRUs to the scene and report whether the distress is drifting/moving left or right. If several different Reporting Parties mark the distress, then the lines of position can be used to acquire a datum. However this may require a mobile unit to take the bearings.

The SMC over the telephone can easily direct the Reporting Party to make the temporary range by having the Reporting Party:

a) Mark where they stand and note a point on land between them and the distress (the second point should be as far as visibility permits)

b) Place two or three rocks or sticks in line with the distress. Obviously place the rocks as far apart as practical.

Having the reporting party call a nearby friend to also mark the distress provides another line of position (ensure the SMC gets the second person's name and number). This simple process has already helped in the prosecution of several cases. I hope it works as well for others.

LT V. M. Weber
USCGR
D9 RCC/OPC

Dear On Scene Editor,

I would like to address a subject which is on my mind. I have great difficulty in understanding the "ready for ops plan" in regard to who actually conducts underway drills.

I have been at my unit for three group inspections and expect another very soon. The best way to explain myself is to give a scenario. The inspection team consists of: (a) Deputy Group Commander, (b) Ops Boss (limited boathandling experience) (c) QMC and a (d)CWO with no shiphandling or boathandling experience. My reaction is where are all the BM1/ODOs who are going to evaluate us. A typical coxswain reaction is, "do these people know what they're looking for?" After getting underway and started on a fog NAV run, the coxswain has his face in the radar, the helmsman is concentrating on his course, the lookouts are doing their job.; when the QMC asks a question of the coxswain – the coxswain answers – then the Ops asks the same question for amplification. The DGC also asks a question. What is wrong with this? Nothing, that's their job, but the coxswain breaks his concentration answering questions before the first turn point. So he goes back to his plot without a problem. Can this be done? You bet. Is it easy? NO! It's easier in fog with no one asking questions or disrupting you. This goes on and on during the drill. Another question comes to mind. This one is about the LORAN. Here is a neat trick: You punch in three stationary waypoints and use the distances from each for a fix. Does this work? You Bet. Is it a good idea to do it? Yes, if our additional secondary phase factor for the area isn't bad. Guess what, it is, and varies so much that it cannot be affectively locked onto the LORAN's memory. But it works a lot of the time. The theory is to use it to back up your Nav plot. The problem is that the coxswain is pressured to do this knowing only a 50 / 50 chance exists of it working. It's done for inspection purposes, maybe it'll work, and maybe it won't work. The coxswain will probably use another method in a real situation. I know I would use other methods that are more reliable, and to me it isn't worth the time unless I am in an area of open water.

The material inspection was normal except for one thing. Two of the examiners have been to the MLB supervisor course. This is an excellent course, however if you have never been a MLB coxswain and you are inspecting a station with a MLB you should keep in mind that you have never been a

coxswain or never even been responsible for the maintenance of a MLB. I think your evaluation might be a little tainted, as you have only learned how to inspect the very best Coast Guard MLB. After all that, the inspection party gives its critiques and leaves. We will improve on what the evaluator wants to see but the feeling of being improperly evaluated remains. To make a long story short, if the examiners were experienced coxswains before, regardless of rate, they would know when to ask questions without asking it at a crucial moment.

They would know what is obvious and what is not. They would know whether some procedures that worked in one place or in a book do not necessarily work in another. They would also know when they were being fooled. But most of all they would command respect, not because of rank but because of experience.

When they depart the unit we would take their advice and truly feel we were evaluated honestly and improve our effectiveness as a unit. When a group has Operational Duty Officers who are experienced coxswains, why not use them to evaluate? When you have a choice between a coxswain and a QMC who is an expert navigator on a ship, when that is his only responsibility, or an OCS grad who has no experience other than school, it seems to me the proper choice would be the BMC or BM1/ODO.

I write this letter to generate feedback. I don't believe that because a person has shown that they have what it takes to be an officer in the Coast Guard and they want to be one, that they can substitute it for experience. The only effect this has is negative in my opinion.

R. T. BARONE,
BM1 USCG

Dear On Scene Editor,

Your 2/91 issue has a very interesting group of action photos on page 22. The most interesting one, to me, is at the bottom of the page. The young man on the left, if he loses control of the nozzle or the hose breaks, runs the risk of incurring a very painful injury and possibly a change in the pitch of his voice.

I suspect that small boat fire pumps don't put out the pressure of large land based pumps but it doesn't take much force to cause a painful or disabling injury, NEVER, NEVER, NEVER STRADDLE A FIRE HOSE!

T. J. ARMSTRONG
VCP, DIV. XX USCG
D5SR AUXILIARY

Dear On Scene Editor,

In regards to the article "Commercial Towing Assistance" on page 24 of the 2/91 issue. LCDR Lewandowski states "... there is no requirement for inspection, certification or otherwise categorizing commercial providers..." of assistance towing.

This statement appears to ignore the requirements for licensing of commercial assistance towing operators found in 46 USC 8904(b) and 46 CFR 15.410. The preceding statute states "A vessel that tows a disabled vessel for consideration shall be operated by an individual licensed by the Secretary to operate that type of vessel on the particular geographic area under prescribed regulations."

With the assistance of Group San Francisco, the MSO was recently successful in suspending the license of a commercial assistance provider who had established a dangerous and disruptive pattern of operations. Working in concert with the local Marine Safety Office, Groups and Stations have effective access to an enforcement tool through the civil penalty, and suspension and revocation venues.

W. B. LELAND
ALEMEDA, CA

About Letters to the Editor:

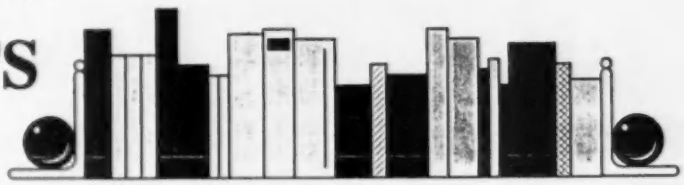
ON SCENE seek letters to the editor and will gladly publish them. Some rules do apply though.

1) The authors name, address, and telephone number must accompany letter.

2) If requested, the authors name will be withheld, but nameless letters will not be considered.

3) ON SCENE has the right to edit all letters for taste, grammar, and length.

INFORMATION ON COURSE CREDITS



By: J. Lewis, Coast Guard Institute

The American Council on Education (ACE) has evaluated Coast Guard Enlisted ratings, correspondence courses, MRN and Coast Guard service schools, and has recommended college credit be granted. They have compiled this information into a book called The Guide to the Evaluation of Educational Experiences in the Armed Services (The ACE Guide). For over forty years, The ACE Guide has been the standard reference work for recognizing learning acquired in the military.

Form DD-295 is the application for the evaluation of educational experiences during military service. This form contains a summary of the various "A" schools and "C" schools and other Coast Guard schools that an individual has attended while on active duty.

Before you begin filling out the Form DD-295, gather together all your certificates, letters of completion, diplomas and any other documentation that shows you have completed the Coast Guard training courses you will list on the form DD-295. Make copies of the above material to be attached to the form when it is completed.

The ACE guide is used to find the number of recommended credits for each training experience to be itemized on the Form DD-295. Before you begin using the ACE Guide, you should read pages xiii - xvii and pages xxiii - xlii. These pages help you to understand the rationale for developing the ACE Guide and how to obtain the information you are looking for regarding your service related educational experiences. The ACE Guide is divided into three sections which are cross-referenced to find information quickly. These sections are Course Exhibits, Keyword Index and Course Number Index. The latter two sections help you find course information in the Course Exhibits section. The top of each section gives instruction on how to use the section.

Upon completion of the above, make a draft of Form DD-295 by filling in pencil section I and section II. (See appendix I) In spaces requiring information or data not applicable to you write "none" e.g., block 13 - few people who are still in service have taken courses from USAFI. If you have not taken a USAFI course, write "none" in this block. In section II make sure that you fill in block 19. The information for this block is found by the process described in the above paragraph. When you have completed the Form DD-295 give it to a person who knows about the college credit program for review. Seriously consider the comments made by this resource person. If you have any doubt about any information to be supplied on the form, ask your ESO. You may also call one of the educational advisors at the Institute: Dr. John Lewis (FTS 747-7239) or Ms. Martha Sterling (FTS 747-7241).

When you have completed the draft of the Form DD-295 and it has been reviewed, make a copy and attach a duplicate of all military certificates, diplomas and letters of completion to the Form DD-295, i.e. for all courses and/or occupational titles listed in blocks 13 through 16. Submit the packet to the person with authority to sign the Form DD-295.

Page 1 of the Form DD-295 is a cover letter to the institution in which you plan to matriculate (See Appendix II). In the space marked "ATTENTION:" type: "The Director of Admissions/Registrar." Then, make copies of the packet and file for future use. In addition to page 1 of your Form DD-295, you may want to send a cover letter to the college. The letter should be in three parts:

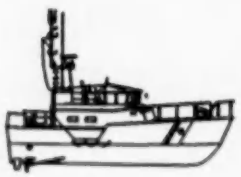
(1) request information regarding the discipline in which you are interested and request a catalog for that discipline;

(2) refer to any CLEP examinations you have taken and any additional credit by examination you may have taken. Include credits obtained from courses taken at other institutions. If you do not have a transcript from other schools, send to the school for a current transcript. Make a copy of the transcript and attach the copy to the Form DD-295;

(3) the closing paragraph should acknowledge your appreciation for assistance in the enrollment process.

Your packet is now ready for submission to a college or university of your choice. You should note that credits as recommended in the ACE Guide are not required on the Form DD-295. When the college gets your form DD-295, they will refer to their ACE Guide and make a decision as to how many credits will be awarded according to the ACE recommendations and their requirements for the degree you have specified. For most two year and four year colleges, service experience is usually accepted as recommended in the ACE Guide. os

47' SAR ACTION



By: MLB TEST TEAM

On June 30, 1991 the MLB 47200 was moored after giving a demonstration ride to RADM Merilees USCGR.

Immediately after mooring word was received that a boat was taking on water. The CO at Station Cape "D" requested the 47200 to respond. The 41333 from Cape "D" also departed for the SAR case

Communication with Cape "D" confirmed that the fishing vessel "DANNY MARIE," an 80 ft. western rigged dragger, was taking on water 27 miles west of the Columbia river entrance. A waypoint to the location was entered into the loran C. Once at the river entrance a course to the distress position was set, using the autopilot. Weather conditions en route were:

SEAS from the South 4 - 6 ft

WINDS from the South 15 - 18 kts

Average speed en route was 24.5 knots. At 1518T the 47200 arrived on scene. At this time a helicopter from CGAS Astoria had already delivered a pump to the fishing vessel, but the crew of the vessel could not get it started. The 47 footer approached and directly passed our P-5 pump to the fishing vessel by heaving line. After, an along side approach was made an MK1 was transferred to the vessel to help with the pumps and assess the situation. The 41333 arrived on scene at 1537T and passed a third pump to the fishing vessel, along with extra gasoline. At 1547 the helo arrived back on scene and directly passed a fourth P-1 pump and a portable VHF-FM handheld radio for backup communications.

The vessel was dewatered and attempted to get underway under its own power, but a reduction gear failure halted the attempt. A stern tow was taken by the 47 footer and towed it to buoy 11 in the Columbia river where the MLB Triumph relieved tow and completed the mission.

-- Mission Performance --

Casualties:

The only casualty encountered during the mission was the door stop / latching mechanisms on the exterior pilothouse W/T door. This device broke (second failure) while holding the door open and slamming down off a wave. This latch is made of cast aluminum and is unsatisfactory for MLB use. We recommended that a latch constructed of stainless steel be identified and retrofitted to the boat. Missing from the boat were the VHF-DF and fluxgate steering compass, both were CASREPed. The absence of the equipment did not adversely affect the outcome of the mission but would have been beneficial to the test under actual SAR conditions.

Electronics / Piloting:

Transits to the scene and the tow back were conducted entirely by autopilot. The autopilot system performed extremely well. It maintained a good course in relatively heavy seas and high speed without exaggerated rudder motions. The system is performing much better in this respect than before the change to vertical rudders. The loran C was used to input waypoints to and from the scene and it performed well. Radar performed extremely well too, both in navigation and target acquisition. The performance of the VHF-FM radio was good. It was especially beneficial to have the ability to use the radio from the pilot house, as the MLB was taking on quite a bit of spray during the transit.

Towing:

The tow was conducted using 550 ft. of the 600 ft. towing hawser and a wire pendant to prevent chafe over the gunwale and the obstructions on the bow of the fishing vessel. Initial turning of the tow through the wind, once hooked up, and turning the initial turn course was somewhat slow. The F/V was approximately 136 GT while the average towing speed was 6 kts. The tow could have been made a knot or two faster without fear of shock loading the line, with an additional 300 ft. of hawser on board. The towing hawser was adjusted once during the tow, as the towing hawser was chafing on the MLB's taffrail. This again makes the point for a smoother surface on the taffrail, or a modification to the rail by lowering the rail or raising the tow bitt.

Helicopter operations:

Two separate helicopter deliveries were made to the 47200. One was made to the fantail the other to the forward deck. Both went well without incident or problems.

Communications:

Communications were conducted with the VHF-FM radio. The F/V had only a hand held VHF-FM radio for communications. After placing the MK1 on board, it was felt to be prudent to place another portable radio on board for a backup. If the helicopter wasn't on scene, we would have been without a radio to pass. Because of this, it we recommend that a hand held VHF-FM radio and trickle charger be installed as part of the boat outfit for incidents like this. It would also provide good back-up Comms for the MLB. An Engineering change proposal (ECP) on this change will be submitted for review.

P-5 pump:

The pump performed well, without any mechanical problems. There was some problem in keeping the suction hose in the water as the level went down. A recommended fix for this problem would be to include some sheet lead in the pump can, this could be wrapped around the hose to give it added weight and hold it down in the bilge. There was some concern after passing the pump that we did not have fire fighting or major dewatering ability for ourselves.

Boat Handling / Maneuverability:

The MLB maneuvered easily while passing the pumps, making the towing approach, and coming alongside the disabled vessel in the 4 - 6 ft. seas to transfer and retrieve the MK1. The boat has ample power and excellent low speed maneuverability characteristics. There were no unexpected motions during the case, although we did not have the opportunity to run down swell at any speed. When we did have following seas, they were encountered with the fishing vessel in tow, which acted as a drogue.

General:

The 47200 transited to the scene at 25 knots. Although the ride was bumpy, adjustment of the throttles kept the wave slamming to a livable level when larger seas were encountered. The chairs both topside and below are very uncomfortable. They provide little cushioning or support, and have too much lateral motion. These characteristics are extremely crew fatiguing. During the transit to the distress, all four crewmembers received bumps and bruises from the fittings and sharp edges in the enclosed bridge while trying to carry out their duties during the mission. The lack of space to maneuver and the many sharp edges on equipment and fittings in the enclosed bridge, makes transiting in heavy weather conditions hazardous and unsatisfactory.

The speed to the scene was impressive in that the 41 footer, which departed at the same time as the 47, arrived 20 minutes after the 47 arrived, and their ride was much worse. As a comparison for response time the 44' MLB would have taken 2 hours to reach the scene and the 52' MLB 2¼ hrs. The speed and ability to run in these conditions without structural damage is a definite advantage.

So Long, And Thanks For All The Fish

By: CWO3 Jake Miller, USCG (RET)

So, it has come to this, my final column. By the time you read this I will be retired. Actually, by the time you read my last column I was on terminal leave. That's how slow the wheels grind in HQ.

I cannot conceive of a more rewarding profession then that of a Coast Guardsman. There is so much potential in this organization that I often couldn't wait to get to work each day. Where else can you do so much to benefit your fellow citizens? Where else can you see the results of what you do so clearly and so immediately? Saving someone, putting in a buoy, working on an oil spill, are all tangible actions that provide immediate gratification. Even providing training quotas and materials to those who were "doing it" was satisfying. I know that these feelings will be impossible to replace in civilian life, but, because that same potential can also make the Coast Guard the most frustrating of jobs, I am bailing out right on the 20 year mark. As I leave though, I think I'll put one more shot across your bow.

One of the smartest things about leadership I ever heard, was said by General Al Gray, on a *60 Minutes* show. At the time General Gray was Commandant of the Marine Corp, He was talking to some Annapolis midshipmen who had chosen to become Marine officers. What he told them was what he thought their priorities as Marine officers should be. He put them in this order: mission, people, and last, self. He then went on to tell them that if they could not live with those priorities, he would prefer they choose a different career. I think those are pretty good priorities that all Coast Guard leaders would do well to emulate.

First, missions – I suppose the most frustrating part of being in the Coast Guard, as an enlisted and an officer, has been what I see as a lack of emphasis on performing the services we were established to perform. Maybe it's because we have always done so well in the past, but I think mission performance has become almost an afterthought to all of the other things that have become important in the last few years.

One of the things the Station Staffing Quality Action Team discovered, is that we spend almost three times more time on servicing our internal

customers than we do on mission performance and preparation. Something is wrong with this picture, but I have not seen any evidence of concrete action to turn the trend around. We've studied it, but somehow the hard observations and recommendations get lost along the way. We talk about it, but the actions to rectify it never get done. To me, this is the leader's job. Only the people at the top, whether station commander, group commander, or all the way up, can change this. This cannot be led from the bottom.

Second, people – something I have always tied closely to missions. I could be wrong, but I think job satisfaction is more important than a lot of the other "people things" we try to do. It's not that housing, medical, and pay, etc. are not important, they are. But, if people are unhappy at their jobs, none of the rest will make up for it. That's where the leader comes in.

The stations I have visited where the people seem to be the happiest, are those with an emphasis on missions and station readiness. At a station, readiness means doing the things necessary for prosecution of the stations missions; that is training their people and maintaining their equipment. The more time they spend doing activities not directly related to this, the unhappier they seemed to me. Accomplishing this, while maintaining morale, requires real creativity from our leaders.

Given no other constraints, you can easily get your missions accomplished. Just get out there and kick some ... and don't worry about whether the people are happy or not. Given no other constraints, it's not hard to keep your people happy. Just don't ask anything of them. But the leadership key, when it comes to people, is satisfying the job requirements and still having a happy crew. This takes real work and creativity. You have to observe. You have to plan. You have to help. And you must do a thousand other things to do this successfully. In 20 years, I have never seen this done successfully while sitting behind a desk.

When I think of our people, I think of them as a resource. Not just for accomplishing something today, but to be developed for tomorrow. What they develop into depends to a great extent on who they work for. If the example you give is one of thoughtfulness and industry, they will pick up on it. If the example you give is that more seniority means less work, they'll pick up on that too. If we want to develop people who believe in what we do, and think it's important to accomplish it, then our leaders have to set that example.

I think that with all of our new sophistication in leadership and management, we have forgotten some tried and true basics. You absolutely cannot develop good people by sitting in front of the TV or reading the newspaper during working hours. If you think your job is only to direct, then I think you're not doing your job. Leaders should be doing the planning that leads to improvement and developing the people who will lead the Coast Guard in the future.

If you want a standard to measure leaders against, use this: Was their unit better when they left then when they arrived? Also, what kind of leaders are the people who served under them? All of the knowledge and experience in the world is useless if you don't pass it on. That can't be done from your office or your cabin.

Anyway, I'm sure you've all had enough of my preaching by now. The old truism about leading, following, or getting out of the way is hereby invoked. I'm getting out of the way. So long, and thanks for all the fish.

MORE ON SARMIS

By: LT Steven Godfrey, G-NRS-1

The long awaited revision of the SAR Data Systems Manual (COMDTINST M5230.10) is nearing completion. We hope to have it out to you folks by November. The manual is now entitled the Search and Rescue Management Information Systems (SARMIS) Manual and it incorporates all of the changes we have gone through during the last nine years since the SAR Data Systems manual was originally issued.

Essentially, the manual is a total rewrite. In it, we have incorporated the SARMIS/DES and SARMIS/DSS instructions, including chapters on system management and troubleshooting. Case reporting requirements have been clarified and helpful appendices added.

The revised Special Studies Codes sent out as ALDIST 222/91 have also been incorporated. This new list became effective on 1 October 91. I've included the new codes in this article in case you missed the ALDIST.

Special Studies Codes

RS	Rescue swimmer used (Aviation)
52	52-foot MLB resource used
47	47-foot MLB resource used
AM	AMVER system queried
CA	CASP system queried
CG	*CG Cellular phone net used
91	911 used to contact CG
CP	Cellular Telephone used to contact CG
SH	Suspected Hoax
CH	Confirmed Hoax
FA	False Alarm
RB	RDF-VHF DMB deployed
SB	Satellite tracked DMB deployed

The following was extracted from the new manual as a reminder. If you check the 1990 SAR Statistics (COMDTPUB P16107.6), you'll notice that we've begun publishing the sub-unit SAR activities and the results were somewhat mixed. If you're following the guidelines already, terrific, if not, get with the program.

Sub-Unit Reporting. There are a number of sub-units in the SAR system which do not have their own OPFAC number and report their cases under the OPFAC of their parent unit. In order to record the SAR activities of these units, the following procedures will be followed:

a. Sub-units shall continue to report SAR cases under the OPFAC of the parent unit.

b. Due to software limitations, the sub-unit shall code its designation in the Special Studies field for every reported SAR sortie.

c. Designations for sub-units will be in accordance with the following list:

Dist	Sub-units	Parent Unit	Code
D1	Block Island	Sta Point Judith	BI
D1	East Moriches	Gru Moriches	EM
D1	Eastport	Sta Jonesport	EP
D1	Fishers Island	Sta New London	FI
D1	Pres. Security Det.	Sta Portsmouth Harbor	PS
D5	Fortescue	Sta Cape May	FO
D5	Roosevelt Inlet	Sta Indian River Inlet	RI

D5	Salem	Gru Philadelphia	SA
D5	Townsends Inlet	Sta Cape May	TI
D7	Air Facility Charleston	Airsta Savannah	CH
D7	Aviation Det, Gitmo	Airsta Miami	AG
D8	Dauphin Island	Sta Mobile	DI
D8	New Canal	Sta New Orleans	NC
D9	Alexandria Bay	Sta Oswego	AB
D9	Holland	Sta Grand Haven	HO
D9	Muskegon	Sta Grand Haven	MK
D9	North Superior	Sta Duluth	NS
D11	Lake Havasu (CO River)	Gru San Diego	LH
D11	Santa Cruz	Gru Monterey	SZ
D13	Air Facility Newport	Gru North Bend	NP
D13	Coquille River	Sta Coos Bay	CR
D13	Rogue River	Sta Chetco River	RR
D17	Air Facility Cordova	Airsta Kodiak, Airsta Sitka	CV

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d. Designations for auxiliary sub-units will be in accordance with the following list:

Sub-units	Parent Unit	Code
Bowers Beach	Sta Indian River Inlet	BB
Bordentown	Gru Philadelphia	BT
Delaware City	Gru Philadelphia	DC
Lake Clark	Gru Philadelphia	LC
Lake Norman	Fifth District	LN

e. Units reporting for sub-units or auxiliary units, requiring a special studies code not reported in the above list are directed to contact Commandant (G-NRS-1) to have a code assigned.

PLEASE NOTE: Beginning in FY-92, the Electronics Engineering Center (EECEN) in Wildwood, New Jersey has assumed responsibility for user support of both SARMIS/DES and SARMIS/DSS products. They will man a hotline from 0700 to 1830 EST and provide an answering machine in the off-hours. We are very interested in how well they do with this new tasking and would appreciate any comments. ⚓

****

E-Mail: HOTLINE/EECEN

Telephone: (FTS) 346-7324
(609) 523-7324

Fax: (FTS) 346-7329
(609) 523-7329

Written correspondence:
Commanding Officer (ca)
CG Electronics Engineering Center
PO Box 60
Wildwood NJ 08260-0060

INTERNATIONAL LIFE–SAVING SYMBOLS !

A. SYMBOLS TO BE USED IN ACCORDANCE WITH REGULATION III/9.2.3 OF THE 1974 SOLAS CONVENTION, AS AMENDED

Numbers are used for reference purposes only and do not indicate the sequence of events, as this will depend on the type of survival craft and launching appliances provided on board the ship.

1. Fasten seat units

2. Secure hatches

3. Start engine

4.1 Lower lifeboat to water

4.2 Lower liferaft to water

4.3 Lower rescue boat to water

5. Release falls

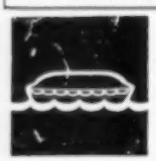
6. Start water-spray

7. Start air supply

8. Release gripes

B. RECOMMENDED SYMBOLS INDICATING THE LOCATION OF EMERGENCY EQUIPMENT AND MUSTER AND EMBARKATION STATIONS

Where appropriate, symbols may be used with a white directional arrow on a green background (see symbol 22).



1. Lifeboat

2. Rescue boat

3. Liferaft

4. Davit-launched liferaft

5. Embarkation ladder

6. Evacuation slide

7. Lifebuoy

8. Lifebuoy with line

9. Lifebuoy with light

10. Lifebuoy with light and smoke

11. Lifejacket

12. Child's lifejacket

13. Immersion suit

14. Survival craft portable radio

15. EPIRB

16. Radar transponder

17. Survival craft pyrotechnic distress signals

18. Rocket parachute flares

19. Line-throwing appliance

20. Muster station

21. Embarkation station
(May be used in lieu of muster station symbol when embarkation and muster stations are the same)

22. Direction indicator
(For use with any symbol)

RESCUE AND SURVIVAL SYSTEMS NOTES

BY: CWO Mark O. Hyde, G-NRS-2

INTERNATIONAL LIFE-SAVING SYMBOLS

Communication is essential during an emergency. There is usually confusion, poor decisions, and/or slow reactions which can make the situation worse. Language barriers can also be a major obstacle in emergency situations. This led the International Maritime Organization (IMO) to draft emergency life-saving symbols. These symbols, although not required for Coast Guard vessels, may show up on our vessels when we purchase SOLAS approved equipment.

WHY THE CG-P-1B PUMP?

By the time this copy of ON SCENE reaches you most of your P-1A pumps should be modified. The P-1A fuel tank was replaced because of stations reporting seam cracks and cap seal problems. The modification kit contains:

- **An improved fuel tank assembly.**
- **An instruction card printed in English, Spanish, French, and Vietnamese.**
- **A new technical manual that reflects all these changes.**
- **A new name plate.**

Units may order modification kits from SCOT Division of Ardox Corporation, 6337 Western Road, P.O. Box 286, Cedarburg, WI 53012. Specify SCOT part 3216 K033. Cost per kit is $38.70 freight prepaid.

The CG-P1B pump will retain the same stock number as the P-1A but new stock numbers have been assigned to some support parts. It will be approximately six to eight weeks before the support parts are available at SUPCEN Brooklyn. Support parts may be ordered from SCOT Division of Ardox Corporation until they are available in the supply system.

NOMENCLATURE	PART NUMBER	NSN
CG-P1B PUMP KIT	3216 K034	4320-01-150-8901
FUEL TANK ASSEMBLY	118.000.490	2910-01-150-8924
INSTRUCTION CARD	61.000.268	9905-01-GG0-1188
TECHNICAL MANUAL	61.000.269	7610-01-GE9-4901
ID PLATE	117.000.554A	N/A

HELP!!! NO MORE RADAR REFLECTIVE BALLOONS.

Every six months I evaluate more than 25 Idea Express suggestions. This can be a good way for you to inform me of new inventions, ways to improve or save money on existing survival gear, and put some greenbacks in your pocket. But these suggestions require a minimum of 2 hours to complete the paperwork, so I'm asking for help. You can do your part by:

1. Don't just send in an Idea Express because you want a flashlight. (I called a MK2 about an idea, and he asked me which one of his 18 current Idea Expresses I was inquiring about. I asked him about why he submitted this particular STUPID idea. His answer was he gets free flashlights. Needless to say I wanted to rip his head off.)

2. Research your idea before you submit it. About 25% of the ideas submitted are either already in use or required by current instructions.

3. Do not submit ideas conceived by reading Buck Rogers comic books. We do not have the resources to develop any high-tech survival equipment. If you know of a source for your idea send it in with the idea.

4. Leave a contact number. The evaluator will call you to ask about your idea and you can tell him why you think it should be implemented. This is your chance to convince the evaluator.

The more we know about your idea the better your chances are to get it approved. So good luck on your suggestions. One last thing, Radar Reflective Balloons do not work.

MORE DRY SUIT UNDERGARMENTS

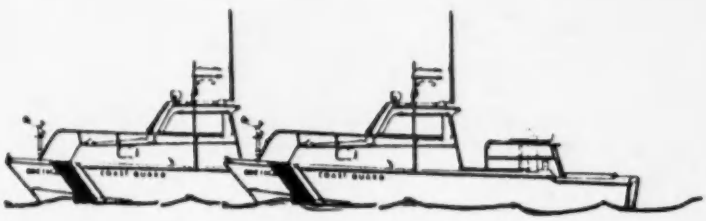
The National Stock System has many items from dogs to airplanes, but it seems you always have a hard time finding what you need. So every issue I will continue to provide you with stock numbers of quality survival items. The following undergarments are blue, one-piece polyester fiberpile (polarguard) jumpsuits.

	Manufactured by Poseidon	//	Manufactured by Great American Ind.
Small	Not Available		4220-00-367-7135
Medium	4220-00-205-8690		4220-00-367-7183
Large	4220-00-205-8691		4220-00-367-7184
X-Large	4220-00-205-8698		Not Available

If you find any new rescue or survival equipment in the stock system, call me at (202) 267-1585 so I can share the information with all units.

Boat Crew Professionalism

(Meet The New Coordinator)



By: CWO Rick Schmidt, (G-NRS-2)

First, I would like to tell you a little about myself. I joined the Coast Guard in July '69. Yes, that is a long time ago! In July '91 I completed my previous assignment as CO, Station Shinnecock, NY, out on the south shore of Long Island. My OIC assignments were at stations Niagara and Buffalo with an XPO assignment at station Milford Haven,VA. My afloat assignments were aboard the Cutters Cape Horn and Edisto. Other units I was assigned to were Boating Safety Detachment 01-1, Station Portsmouth Harbor, and Air Station Miami.

Why am I still in the Coast Guard? Suffice it to say that I still enjoy it. I won't hesitate to admit that I've had more than my share of XPO, OIC, and CO assignments. I think we all have in mind what type of unit we least desire and most desire. When you are offered the latter, you don't pass up the opportunity. With that said, you're probably saying ... "He must really like his new assignment at Headquarters"? The truthful answer to that question is: I do enjoy it for several reasons. The commute isn't that bad, there is a lot for a family to do in the area, and with my experience and concentration of assignments in the small boat / station arena, I feel, I can make a worthwhile contribution during my assignment at headquarters.

Here are several points I will be stressing and areas where I'll be working:

1. Boat Crew Professionalism.

This area is of principal concern to me. Like my predecessor, CWO MILLER, I will continue to talk, preach, and harp at times about this subject. Yes, I will pick apart a mishap once in a while! Don't take it personal if it's yours. We sometimes do learn - THE HARD WAY - through the misfortunes of others. Although, on the other hand, for the token mishap, the vast majority of our small boat operations are performed SAFELY and PROFESSIONALLY. I think everybody in our community would like to hear how well an operation went. I do acknowledge that everything is not black and white so we need to share in those good experiences also. If you have prosecuted a case and can attribute the overall success to a combination of following STANDARD PROCEDURES and some CRITICAL THINKING which, in fact, avoided a mishap, we want to hear about it. If you're a Group / Station OOD, Coxswain, or Crewman lets share the good experiences too! Send in the SITREP or narrative of the event with comments by those involved as to what prompted their decisions in a situation that could have been assumed to be "routine."

2. The standardized boat crew training program along with its qualification / certification process, and the attendant manuals for the program.

3. The Ready for Operations program and its attendant manual.

4. UTB/MLB Standardization Team liaison.

In this area, I will receive feedback from the STANTEAM's concerning the effectiveness of our training programs with recommendations for modifications needed to enhance boat crew professionalism. The STANTEAM's have done an

excellent job and serve as the barometer for the material condition of our standard boats and the professional ability of our crews. Please remember, that although their responsibility is to evaluate, they can and are willing to assist stations and groups. For group staffs, they can show you how to develop and conduct a ready for operations inspection or aid the station in developing a more comprehensive training program. All these "HELP-MEs" though will be clearly dependent on your willingness to walk out from behind your desk. WHAT A DEAL !

5. I'm also the training quota coordinator for units desiring quotas for Coxswain 'C' School and Officer in Charge/Executive Petty Officer School.

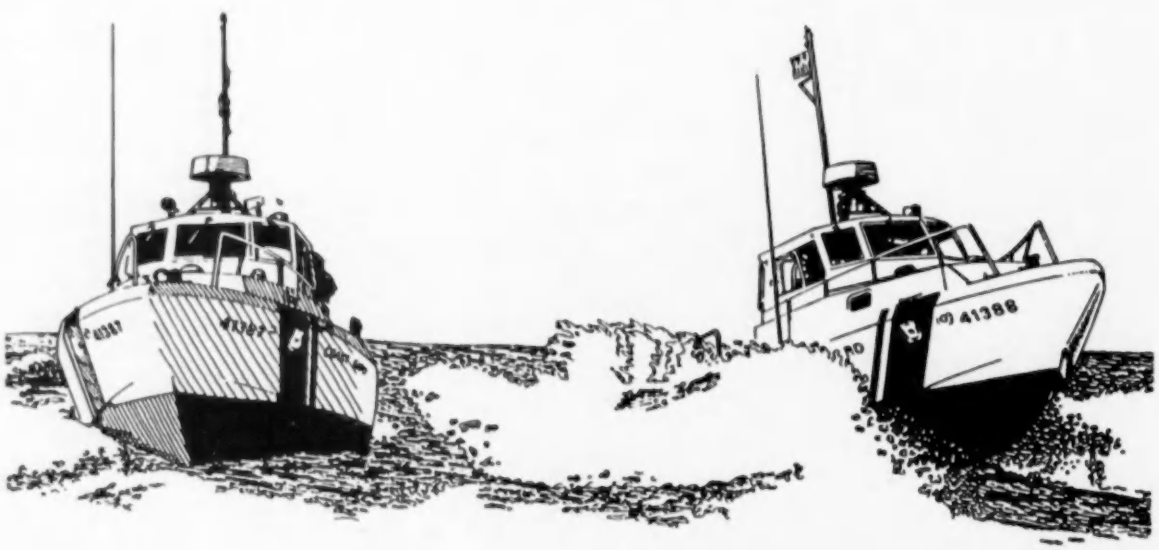
This fiscal year we have 112 quotas for Coxswain 'C' School and I will try to increase them for up-and-coming years, but at the present time I'm being very selective about who goes. How many coxswains you have, how many Boatswains Mates are presently unqualified, and rotation dates are all factors. What unit can be helped the most, and if they are asking for more than one quota, it comes down to which candidate is going to benefit the most from attending. At this time there are enough SNBMs and BM3s needing the school that issuance of a quota for a non-rate this year will be rare. BULLET - Attendees must be boat crewman qualified and certified when they report to school. There is a pretest. Failure to pass it will result in the member being sent back to their home unit. This has occurred and it results in a waste of travel expense and the loss of a quota for someone who could have benefited from attending.

"QUESTIONS TO PONDER"

Let's revisit the area of boat crew professionalism. At some units, in the last year there was a 35 - 65% turnover in personnel. Now is the time to take a look at your training program. Does it conform to current instructions? Do we have to modify it to handle the influx of unqualified personnel? Do the NEW PEOPLE have enough quality time with their running mates to qualify in a timely manner? Should we rotate the present collateral duties of assigned personnel by increasing the experience base of assigned personnel?

Another area is SAFETY. Are we conducting small boat operations and training in a safe manner? Safety concerns in this area could be the single agenda topic of a monthly safety board meeting or at least annually. If you undertake this suggestion you might be surprised at what comes to the surface. Make it a Total Quality Management (TQM) problem. Get people involved.

If you have any questions, please call me. USE FTS (the numbers are in the back of the magazine). If you attend any schools, give honest and thorough critiques. Good luck this winter prosecuting SAR and don't take unnecessary risks. Be the prudent mariner and minimize mistakes. SEE YA!



CELLULAR TELEPHONES IN SAR

By: CDR D. Perkins, G-NRS-1

It seems like everywhere you go these days, someone is using a cellular telephone. They certainly are portable and convenient; you can use them to order a pizza from your car, make a date while at the beach, or call the Coast Guard when your boat starts sinking...

Not only are they easy to use, their cost has been coming down steadily. Nowadays you can buy a mobile cellular telephone for about the same price as you'd pay for a good VHF-FM marine radio. Cellular phones have become so popular, in fact, that some boaters pressed for cash are not bothering to buy a VHF radio at all. **This is not good!** Cellular phones have some serious drawbacks for the mariner in distress. We don't have any means to home in on a cellular telephone signal. We can't use our direction finding network to locate a cellular telephone user who is disoriented. Cellular telephone conversations cannot be heard by other boaters who may be in position to render immediate aid to someone in distress. A recent case in Hawaii was made much more dangerous because there were no direct communications between the rescue helicopter and a boat with an injured person; the boater had only a cellular telephone on board.

Because of these reasons, VHF-FM radios are, and will remain, the preferred method for maritime distress communications. Cellular phones are NOT a replacement for VHF-FM radio; rather, they normally are a reliable SECONDARY means by which someone can contact the Coast Guard.

That said, Bell Atlantic Telephone Company approached the Department of Transportation last year with an offer to establish a special access code which boaters can use to directly contact Coast Guard Group operations centers in emergency situations. This past summer we have been testing a prototype system in the area from Toms River, NJ, to Chincoteague, VA, including Delaware Bay and upper Chesapeake Bay. Any boater in distress in that area can use a cellular phone to call the Coast Guard by keying in *CG (star C G). Telephone switching networks connect the call directly to the Group OPCEN in whose AOR the caller is located.

The phone company advertised this service heavily in their monthly billing statements. Somewhat surprisingly, no major problems have occurred with misrouted or inappropriate calls; neither has there been the volume of calls expected. Group Baltimore received eight non-test calls, two of them actual requests for assistance while Group Cape May received three calls, all of them tests. So much for the onslaught...

With the President's Commission on Management Improvement showing interest in the *CG concept, a DOT task force will explore expanding the Fifth District experiment into a nationwide system. Other countries have or are developing similar systems using *16 and *SOS. G-T sent an E-Mail to all Flag Officers, with a copy to all District's (dt) and (osr) staffs, which set forth CG cellular telephone policy. In short if the local cellular phone providers want to set up a direct access code, then we want *CG to be the code adopted. These direct access codes are to be used ONLY for reporting distress situations and hazards to navigation.

In the past, we have relied on the "911" emergency switching network to relay calls from cellular telephone users. In spite of the foregoing, you still need to be proactive in ensuring that maritime distress calls to 911 are PROMPTLY routed to the proper Group operations center.

Cellular telephones are not going to go away. In fact, some say that they are the wave of the future. As technology changes, the Coast Guard will have to change, too. (Yes, Martha, the elephant can learn to dance.) **But, no, don't send in any requests for us to put cellular phones on your boats and airplanes. ...At least not yet.**

"TO FIGHT TO SAVE,

OR FIGHT AND DIE..."

(THE STORY OF LT JACK RITTICHIER, USCG)

BY: LCDR C. Douglas Kroll, CHC, USNR

1991 marks the 75th anniversary of Coast Guard aviation. A major part of that history deals with Search and Rescue. However, there is a chapter of that history that is known by very few, even within the Coast Guard, and that is the story of Coast Guard aviators flying combat search and rescue in Vietnam. Between 1968 and 1975 twelve Coast Guard aviators, as part of a pilot exchange program with the US Air Force, flew out of Tuy Hoa and Da Nang, as well as Thailand and the Philippines. Tours for these aviators were one year in Southeast Asia and two years in the Philippines. Helicopter pilots flew Air Force HH-3E's and later HH-53's while fixed wing pilots flew Air Force HC-130's.

One of these twelve aviators was LT Jack C. Rittichier, a Coast Guard Hero who epitomized the highest traditions of the Coast Guards search and rescue mission.

Jack C. Rittichier was born on August 17, 1933 in Akron, Ohio. He graduated from Coventry High School in 1951. An actor, singer, artist, and athlete, Jack obtained a Bachelor of Arts degree from Kent State University while captain of the football and track teams.

Commissioned as an officer in the United States Air Force in August of 1957, Jack Rittichier trained as a pilot at the Air Force Bases in Bainbridge, Georgia and Laredo, Texas. He earned his wings in December of 1958 and served as a B-47 bomber pilot with the Strategic Air Command at Whiteman Air Force Base, Missouri.

John Rittichier was discharged from the Air Force as a Captain to accept a commission as a Lieutenant (Junior Grade) in the Coast Guard Reserve on September 26, 1963. His first tour of duty was at the Coast Guard Air Base at Elizabeth City, North Carolina, where his duties entailed (SAR) pilot, acting legal assistant, and public information officer, among others. He received a Coast Guard Unit Commendation for his rescue work during hurricane "Betsy" in September of 1965. He was promoted to the rank of Lieutenant in the regular Coast Guard on March 28, 1966.

In May of 1966 he was reassigned to the Coast Guard Air Station at Selfridge Air Force Base, Michigan as a SAR pilot, assistant operations officer, and public information officer. For his role as the copilot of a helicopter that flew 150 miles from Detroit, in blinding snow and ice conditions, to rescue eight seamen from the grounded West German motor Vessel NORDMEER minutes before it broke up and transferred them to the USCGC MACKINAW (WAGB 83). Jack was awarded the Air Medal in June 1967.

While at Air Station Detroit he volunteered for exchange duty with the Air Forces 37th Aerospace Rescue and Recovery Squadron at Da Nang Air Base, Vietnam. The exchange program called for each of the services to trade five pilots (three helicopter and two fixed wing) to acquaint them with the tactics, techniques, and activities of the other services in search and rescue work. The five Air

Force pilots were sent to Coast Guard Air Stations in the United States. Coast Guard helicopter pilots flew Air Force HH-3Es and later HH-53s, out of Da Nang, while fixed wing pilots flew Air Force HC-130s out of Clark Air Force Base in the Philippines.

Prior to arrival in Vietnam the rotary wing pilots underwent extensive training. Following instructions in flying the H-3 helicopter at Sheppard Air Force Base, Texas they underwent Combat Crew Survival at Fairchild Air Base, Washington. They then went to Francis E Warren Air Base, Wyoming for mountain flying training. Their final training included instruction in air to air refueling from the HP model of the C-130 and in Combat Search and Rescue tactics with escort aircraft.

Arriving at Da Nang on April 10th of 1968, Jack Rittichier quickly showed the Air Force the kind of courage Coast Guard aviators have. On April 21, less than two weeks after arriving at Da Nang, he was awarded the Distinguished Flying Cross for rescuing, in the face of hostile ground fire, four crew members of a US Army helicopter gunship that had been shot down by the enemy. During the rescue Rittichier served as the rescue crew copilot of an HH-3E helicopter.

On May 12, LT Rittichier this time serving as the Rescue Commander of an HH-3E, twice entered an extremely hostile area to rescue four survivors of a downed helicopter and its five seriously wounded personnel. The survivors were located in an extremely small landing zone, surrounded by trees on the side of a steep mountain slope. LT Rittichier made the second approach and departure by flare light because the sight was obscured by smoke clouds. For this, he was awarded a second Distinguished Flying Cross.

Less than a month after that on June 9, 1968, 37 miles west of Hue a Marine Corps fighter pilot lay on the ground with a broken arm and leg. His further misfortune was parachuting into a North Vietnamese army bivouacking area. The enemy used him as bait to lure the Jolly Green Giant rescue helicopters within killing range. Air Strikes pounded the area around the Marine pilot. The first helicopter made three attempts to reach him but was seriously damaged in the process and had to break off.

LT Rittichier dove his HH-3 with three Air Force Crewman on board in for the pickup. Heavy enemy fire forced him off. He swung around to let the gunships clean the area again and followed them in

LT Jack Rittichier, USCG outside of his quarters at Da Nang '68

for another pickup attempt. As he hovered over the injured pilot, bullets punched his aircraft and it began to burn. He pulled away, but the Giant would not rise. It settled to the ground and exploded. Within thirty seconds a ball of fire consumed the aircraft. LT Rittichier's remains were never recovered and he is still officially listed as "Missing in Action" (MIA). He remains today as the only Coast Guard MIA from the Vietnam War. LT Rittichier was also the first Coast Guard casualty in Vietnam caused by enemy action.

Jack Rittichier gave his life for the proudest Coast Guard mission of all ---- Saving Lives. For his courage and heroism he was awarded the Silver Star and the Purple Heart (posthumously). He exemplified the highest traditions of the Coast Guard and also the valor shown by other Coast Guardsmen in Vietnam. Six other Coast Guardsmen lost their lives while serving in South East Asia and fifty-nine were wounded.

On June 16, 1969, Rear Admiral William F. Rea III, USCG, Commander of the Ninth Coast Guard District dedicated the hangar of the Coast Guard Air Station at Selfridge Air Force Base, Michigan in LT Rittichier's memory. At the dedication ceremony, RADM Rea presented LT Rittichier's widow the Silver Star Medal, the Distinguished Flying Cross with two Oak Leaf clusters, and three Air Medals, all of which Jack Rittichier was awarded for his service in Vietnam. The Rittichier Memorial Hangar stands as a tribute to this Coast Guard Hero.

His widow, the former Carol Ann Laux, remarried several years after his death to another Coast Guard Aviator.

UPDATE...

By: CDR Steve R. Osmer (G-NRS-1)
(with a little help from the CASP Team)

Since my last article in the 3/90 issue of On Scene, the CASP Team has been busy continuing its efforts to complete improvements to CASP before the planned rewrite and technology upgrade scheduled to begin in FY-92. This rewrite and upgrade project will be coordinated by the Research and Development Center.

Unfortunately, during FY-91 all our efforts on CASP have not been as successful as the team had hoped. This was not due to any lack of effort on their part, but rather due to circumstances beyond the team's control. The Operations Computer Center (OCC), New York, as I warned in my last article, was severely constrained by loss of programming personnel and preparations to shift operations to the Operations Systems Center (OSC), Martinsburg, WV. Thus, the OCC was not able to incorporate a number of approved changes to CASP. The International Ice Patrol (IIP) probably had its most severe iceberg season ever; it was not able to cease reconnaissance and warnings to shipping until the end of August. Thus, the IIP oceanographers were not able to lend their invaluable expertise to the CASP effort, to the extent they had desired.

In spite of the above, the following were still accomplished during FY-91:

- IIP (Dr Don Murphy, LT Al Ezman) has

validated the U.S. Naval Fleet Numerical Oceanography Center (FNOC) Regional Gulf Stream Model and recommended it be incorporated into CASP. This action will be done during the CASP rewrite. This FNOC model will replace the weekly, hand-digitized Gulf Stream data that IIP supplies to CASP. This hand-digitized data can be up to two weeks old by the time it is entered, and it has a coarse resolution. The FNOC model will supply daily Gulf Stream predictions on a finer resolution for use by the RCC's. Hopefully, the Fifth District will experience fewer frustrations when they have cases in and on the edges of the Gulf Stream once the FNOC model is incorporated.

o The Coast Guard Academy's (CGA) LCDR Bruce Viekman (Physical Oceanographer, Dept of Science) and Cadet 1/C (now Ensign) Terry Jordan researched a new NOAA climatological ocean current file and have recommended it also be incorporated into CASP to replace the present historical current file which is based on questionable ship set and drift information. This replacement will be done during the CASP rewrite.

o The R&D Center's ISARC (Improvement in SAR Capabilities; Mr. Quincy Robe, Project Manager) Project staff continued its liaison with FNOC and research into how best to incorporate FNOC's vastly improved environmental files. Additionally, ISARC has begun to look at small regional models that may be appropriate for use by group opcens.

o The National SAR School (NSS), Yorktown, reintroduced CASP instruction during FY-91.

o The CASP Functionality Requirements were approved. (Up until now, there had been no approved document specifying what CASP was suppose to do. This document will function as the basic guideline for the rewrite and upgrade effort.)

o A three day CASP and AMVER training session was conducted at OCC for representatives from each RCC. LT David Vaughn of D7 opcen assisted in providing this valuable training.

o EECEN has joined the CASP Team. Its representative is LCDR Dale Streyle who has been working on the development of the Geographical Display Operational Computer (GDOC) system that may form the basis of a graphical presentation for CASP in the RCCs.

o Myself, CDR John Frost (CO, OCC), Quincy Robe (ISARC Project Officer, R&D Center), Dr. Murphy (Chief Scientist, IIP), and LCDR Richard Kassler (Dept of Science, CGA) wrote a paper on CASP and the Coast Guard's efforts to improve this invaluable search planning tool for the International Motor Life Boat Conference. Due to personal commitments I was unable to present this paper, but CDR Frost unselfishly volunteered to travel to Oslo, Norway, this past June to do the presentation and explain to this prestigious audience exactly what the US Coast Guard has in CASP, and what it is trying to do to improve this computerized search planning tool.

o In May, members of the CASP Team visited the US Naval Surface Warfare Center (NSWC) in Dalhgren, VA, for a briefing on the great-grandson of CASP. This Navy product is being developed by the same company that put together the Coast Guard's CASP back in the 1970's. Though this Navy model is technologically superior to ours, and has a lot of bells and whistles, the CASP Team felt that our CASP is still physically correct and that it should be retained.

The CASP Team will assist the R&D Center during the rewrite and upgrade effort. The CASP Team was an ad hoc, multiunit endeavor and it is envisioned that it will form the core of the future infrastructure that will continue to maintain and support CASP.

At the R&D Center, Groton, CT, the CASP rewrite and upgrade will be directed by the Information System Technology and Development (IST&D) Project under Mr. Don Cundy. CDR Frost has been obtained as a Special Project Officer to assist on the CASP effort. The ISARC project will continue its involvement with CASP, emphasizing the environmental files, worldwide coverage, local area models, incorporating DMB data, and drift algorithms.

Finally, a special study code has been added to SARMIS for the RCCs to identify those SAR cases for which they queried CASP (and/or AMVER). These codes are CA for CASP and AM for AMVER.

In my next article, I hope to explain what the three year CASP rewrite and technology upgrade project hopes to accomplish.

G-NRS-1, SYSTEMS SECTION

By: LT Steven Godfrey, G-NRS-1

There is more to the Systems Section of the Program Branch than simply SARMIS. A whole lot has happened over the last year including restoration of the SAR Simulator, shaking most of the bugs out of the District Subsystem software and conducting on site training, progress on the eventual SARMIS replacement, work on the Geographic Display Operations Computer (GDOC), and we even managed to put out two SAR Statistics Publications (1989 and 1990). Not to mention AMVER II and the relocation of OCC New York to Martinsburg, WV. along with our regular statistics output.

The SAR Simulator is back on line in its new home at the R&D Center in Groton and we've managed to run a number of simulations. The simulator is fed by all the data submitted by the field and is used to help managers decide where resources should be located, etc. The results are promising and the staff here at HQ is certainly glad to be using this important tool once again.

A number of versions of SARMIS/DSS have been issued and tested out at the districts. The folks up at the EECEN in Wildwood have been great in fixing bugs and turning around new versions. Early on, LT Pat Geddes was constantly on the road conducting training and with the help of PO Conners out in D11, a working DSS finally resulted. LT Geddes has departed for G-NRN (Radio Aids to Navigation) and ENS April Dattke now has the ball. She's been on the road a lot recently as well. Kudos to the district SAR Data Coordinators for all your work in getting both FY-89 and FY-90 SAR data in. As of this writing, for FY-91, we're well on the way to closing out the year in record time.

Where does SARMIS go from here? Well, for starters, there are a number of initiatives we're working on including SCRS, OIS and a total SARMIS rewrite. SCRS, described as the "Short Cut Reporting System" is the brain child of the folks up in G-T and EECEN. The purpose of SCRS is to provide a better "user interface" (that's what shows up on the computer screen for you noncomputer types) for both SARMIS and SEER, possibly combining the two to eliminate some of the redundancy of the data entry. OIS is the future Operations Information System. OIS is underway up at the R&D Center and will be coming soon to a computer near you (FY-93 & 94). If all else fails, a total SARMIS rewrite will most likely be done in FY93 as part of the OIS project.

GDOC ?

GDOC is the Geographic Display Operations Computer. It is currently undergoing test and evaluation at EECEN in conjunction with a number of proposed applications, one of which is SARMIS/DSS. Within a few short months, the districts should be able to do density plots for their respective AORs without having to request them from HQ. GDOC stores digitized maps on the hard disk which can be displayed on the screen and merged with data containing a lat/long reference. In addition, EECEN is developing a GDOC interface to the new AMVER II software.

SAR STATISTICS PUBLICATION
(COMDTPUB P16107 series) -

By now, those of you on the distribution list should have received your copy of the 1990 SAR Statistics. If you didn't get a copy and you just can't live without one, feel free to give us a call. We're also seeking pictures for inclusion in the FY-91 publication. Send photos of your SAR cases (the more dramatic the better) along with a full caption. We'll credit the photographer if his / her name is provided. For more information on the publication contact Ms. Sue Holden at FTS 267-1089.

AMVER II -

Began testing during October. The new version is a major redesign. The software incorporates the capabilities of the Standard Workstation with the information on the computers at OSC. It provides the controllers a much easier way of manipulating AMVER data with color presentation and mouse

"pick and click" retrieval capabilities. In the near future, graphics will be added to show land masses in relation to a SURPIC (SURface PICture).

OSC MARTINSBURG -

The Operations Systems Center in Martinsburg was commissioned on 30 September. As the new home for CASP and AMVER II, we've been working closely with the folks in G-T to pull off a smooth transition. The new facility is state of the art and one that the Coast Guard can rely upon for years to come.

SAR STATISTICS -

ON SCENE 1/91 contained an article by Ms. Sue Holden (SARMIS and YOU). In it, she outlined the procedures for getting specific information about your individual unit. She can provide you with density plots illustrating the location of cases in your AOR, show you where lives have been lost and tell you all about your unit's stats. A simple rapidraft or letter signed by the CO or OinC is all you need. The letter should be directed to Commandant (G-NRS-1) outlining your request in detail. Please include a name and phone number in case there are questions concerning your request. If you are not sure we can provide what you need, give her a call at FTS 267-1089 to explain your specific needs. She has at her disposal Fiscal Years 1980 to 1990 complete and hopefully, with the new SARMIS DSS, we'll soon have the Fiscal Year 1991 data.

NOTE:

Private citizens seeking SAR information should be directed to forward their requests under the Freedom of Information Act. Procedures for submitting these requests are contained in the Privacy and Freedom of Information Acts Manual (COMDTINST M5260.2).

COAST GUARD EMERGENCY MEDICAL TECHNICIAN PROGRAM

By: HSC Bruce Thomas, Assistant Chief EMT School

As of October 1, 1990, the National Registry of Emergency Medical Technician (NREMT) certification became the standard for the Coast Guard Emergency Medical Technicians (EMT). All Coast Guard EMTs, not Nationally Registered, were instructed by ALDIST 255/90 to seek National Registry Certification before their state certification expired or no later than 01 October 1992.

To become a qualified Coast Guard EMT, personnel must attend a basic level EMT program which utilizes the DOT National Standard Curriculum and offers National Registry certification. TRACEN Petaluma EMT School meets these requirements. Personnel who want to attend EMT School at TRACEN Petaluma should submit a Short Term Training Request to Commandant (G-KOM). Personnel are not Coast Guard EMTs with a qualification code of "HD" until the NREMT exam is passed. The NREMT allows an individual to take the NREMT exam up to three times. ASMs are mandated by Congress to be EMTs and are considered to be "operational" until they receive the results of the NREMT exam. If the ASM fails the exam, he/she has 60 days from notification of failure to pass the second exam. If the ASM fails the second test he/she is grounded from rescue swimmer operations until the third exam

is passed. All personnel who fail the NREMT exam three times must attend a DOT approved refresher course in order to retake the exam.

Personnel who are currently Coast Guard EMTs or State certified EMTs and have had a state or DOT practical exam within the last year may seek NREMT certification by challenging the NREMT written exam. Personnel who are more than one year but within two years of initial training or recertification must complete a state or DOT practical exam in order to attempt the written test. Personnel may take the NREMT certification exam at most DOD EMT program sites, any other NREMT test site, or at the nearest DANTES Approved Test Site. DANTES Test Control Officers can find information concerning the exam in the **DANTES EXAMINATION PROGRAM HANDBOOK, VOLUME II, (DOD 1332.8H of 1 OCT 90 or later edition). DANTES FORM 1560/14 must be used in ordering the exam.** A copy of the DANTES manual excerpt can be obtained be by contacting the Coast Guard EMT School. Information concerning the location of the nearest civilian or DOD NREMT test site can be obtained by calling the NREMT Office at (614) 888-4484.

The certification fee ($15) will be paid for by the Coast Guard if the following guidelines are followed: Examination applications should be accompanied by a letter from the member's Commanding Officer or Officer in Charge certifying that the member is on active duty and requesting that NREMT charge the test fee to the TRACEN Petaluma Blanket Purchase Agreement (BPA). A copy of the letter must be sent to the following address:

Chief, EMT School
U. S. Coast Guard Training Center
Petaluma, CA 94952
Attn: NREMT Manager

Once certified, EMTs must complete certain requirements in order to maintain NREMT certification. Personnel must complete 48 hours of continuing education (CE) every 2 years, maintain a valid CPR card, and complete a 24 hour DOT approved refresher course. If these requirements are met, the member does not have to retake the certification exam. Personnel who desire to attend TRACEN Petaluma EMT School refresher course may submit a Short Term Training Request to (G-, KOM) at least 12 months prior to expiration of NREMT certification. The recertification fee ($10) will be paid for by the Coast Guard following the previously mentioned BPA payment guidelines. Documentation to be submitted to the NREMT should include a copy of the refresher course completion certificate, a copy of the current CPR card, and a copy of the member's training record outlining all EMT specific Continuing Education, and any other Emergency Medical Service (EMS) training certificates for the certification period. The training record must be signed by the unit Training Officer.

Continuing Education is considered any lecture or drill containing topics covered in the DOT National Standard Curriculum as found in any of the usual EMT texts such as those from Brady (Emergency Care), Morton (Prehospital Emergency Care and Crisis Intervention), or American Academy of Orthopedic Surgeons (Emergency Care and Transportation). Also applicable are courses in Prehospital Trauma Life Support (PHTLS), Basic Trauma Life Support (BTLS), ambulance driving, and most other EMS conferences and EMS training. Giving basic first aid lectures will not cover this requirement. Additionally, members may log up to 24 hours of the 48 hour requirement in Coast Guard SAR specific drills and training (such as basket hoist, rescue swimmer drills, surf drills, man overboard drills, etc.). EMTs who complete boatcrew check off booklets, or coxswain or surfman check off booklets can log up to 24 hours of continuing education. However only 24 hours of SAR specific continuing education can be logged in a 2 year period. Actual SAR cases do not count. The balance of the Continuing Education must be made up of medical lectures, drills, and video tapes. Video tapes can be borrowed from the TRACEN Petaluma EMT School video library. The video continuing education should be logged in the training record and credit will be given by NREMT on an hour per hour basis up to a maximum of 10 hours.

To order video tapes, or if you have any questions pertaining to the Coast Guard EMT program or the National Registry Certification Program, call the Coast Guard EMT School at (707) 765-7040, (FTS 623-7040).

SAR DOGS

HELICOPTERS

By: LTJG Paul D. Lange, Air Station Elizabeth City

In the jargon of search and rescue helicopter pilots a SAR dog is an animal with enthusiasm and eagerness for SAR cases. I flew on a SAR case recently searching for persons in the water in the James River where I had an opportunity to see a real SAR dog in action. The Virginia Search and Rescue Dog Association provided a search team consisting of a handler and a well trained German Shepherd. We were trying to locate a twelve year old boy last seen after falling from a raft 200 yards off shore. Observers on shore reported watching the boy struggle then disappear below the surface. Despite the efforts of our HH-60J and HH-3F helicopters the Coast Guard was unable to save the child. The body was recovered 4.6 hours later by divers of the Newport News Police Department.

I wondered if the helicopter had hampered the effectiveness of the SAR dog on this case so I called Alice Stanley, President of the Virginia SAR dog Association and asked these questions:

Q: What chance of success does a dog have in locating a drowning victim under water?

A: Better than a helicopter. I learned of documented cases of dogs locating drowned persons submerged in 75 feet of water. A partially submerged victim presents no problem for the dogs because the scent intensity seems to be the same as that of a subject on land.

Q: How does a dog smell something under water?

A: Only the dog knows. The scent of body gases and skin particles may rise to the surface as air bubbles.

Q: How do you teach a dog to search for drowning victims?

A: The dog already knows the scent of humans. Trainers work with the dogs to alert when a human scent is detected. An alert signal may be the dog raising its head, biting at the water, or attempting to dive into the water after the scent. Scuba divers in known positions evaluate the degree of accuracy of the dogs. The dog is rewarded by playing with a stick.

Q: How accurate is a dog search?

A: Scent from a submerged victim is subject to water current as it rises and then the wind once on the surface. The total drift may be large. By having dogs approach an alert area repeatedly from different directions an area small enough for divers to search efficiently is determined. In most cases the dog has narrowed the search area to within 100 feet of where the body was found. The most accurate alerts in deep water have come after the victim has been submerged for more than 48 hours. The least accurate alerts will be in areas where the scent of spectators on shore or in the search area confuse the dog or mask a target.

Q: What on scene conditions are best for SAR

dogs?

A: Winds at five knots, low humidity, and calm seas. But the SAR dog team will work in almost any conditions. The German Shepherd is the American SAR dog Association standard because they are a hardy breed with a double coat which sheds water and serves as insulation from extreme heat and cold. The dogs are trained to work for 8-10 hours at a shift with a ten minute break each hour.

SAR DOG NB02

Q: Does a helicopter on scene reduce the effectiveness of a SAR dog?

A: Yes! The dog is ideally stationed in the bow of a small john boat, either rowed or powered by an electric motor at a speed of five knots. His footing is often precarious. The waves and chop developed by helicopter rotor wash is a real distraction. The turbulence of helo rotor wash randomly scatters scent information. The SAR dog is most useful in reducing a large search area to manageable proportions for divers and dragging operations. The SAR dog team will always start working downwind of the search area to maximize their coverage. Helicopters should remain well downwind of a work dog.

Q: Does a helicopter frighten a dog?

A: No! Dogs are often transported by helicopters to the scene of a drowning, especially if the driving time to the scene exceeds three hours. They are trained to ride in helos.

I am trained to fly in helos too. I have 3500 hours of pilot time and I'm still afraid of them. I think a helicopter hovering nearby while I stand on the bow of a john boat would be a major distraction. The best advice is for helicopters to remain clear of SAR dog water operations.

PCO/PXO Ashore Course Will it Happen?

By: LT Dean Lee, G-NRS-1

Ever wonder why prospective COs and XOs (PCO/PXOs) in the afloat community have pre-command pipeline training while their counterparts at the group/station level do not? Wonder no more. There is finally a push afoot at HQ to establish a permanent PCO/PXO ashore course at Reserve Training Center Yorktown for incoming group/station command personnel.

Following a year-long, joint development effort by RTC, G-PRF, and G-NRS, a two week pilot course was convened in June 1991 to evaluate curriculum, gain student input, and subsequently assess the feasibility of establishing a permanent command ashore training program. Although the final curriculum is still under evaluation, positive preliminary feedback gained from student critiques indicated that the course should be continued.

Beyond just teaching administrative responsibilities and requirements, future courses will expose PCO/PXOs to multiple issues, specifically emphasizing SAR, MLE, MER, military justice, human resources, and facilities management.

Although the likelihood of this course receiving final approval is not yet certain due to our austere budget and personnel resource climate, RTC, G-PRF, and G-NRS are continuing to strive to make it happen. We'll keep you posted!

ATLANTIC AREA OPCEN HOSTS INTERNATIONAL SAR CONFERENCE

By: LT Michael Fijalka, Coast Guard Atlantic Area Operations Center

The Atlantic Area Operations Center hosted the fourth biennial North Atlantic Maritime Rescue Coordination Center (RCC) Search and Rescue Conference on Governors Island, May 20–22. The RCCs having search and rescue responsibilities in the North Atlantic Maritime region have been meeting every two years, since 1985. The purpose of the original meeting was "to explore areas for practical cooperation particularly as a result of improving search technology and satellite communications, and to improve knowledge of SAR procedures and the resources of nations concerned." The meetings have also provided a forum for controllers to meet their foreign counterparts and network informally.

Sponsorship of the previous three conferences has rotated each year to a different RCC. The first was held at Falmouth, England, the second at Halifax, Nova Scotia, and the third at Reykjavik, Iceland.

The theme of this year's conference was "New Technologies and Developments in Search and Rescue Capabilities." The conference was attended by 34 participants representing eight countries. Representatives included the Chief of the Icelandic Coast Guard, Chief of Operations for the Royal National Lifeboat Institute, UK, Chief, Coast Guard Search and Rescue Division, as well as many of the directors of the RCCs in attendance.

Atlantic Area set an ambitious agenda to maximize exchange of information and provide time for informal discussions. The conference began with presentations by the RCCs on case studies of recent SAR cases. The emphasis was to provide lessons learned which would be applicable to all RCCs or to point out particularly noteworthy innovative technologies employed. RCC New York presented the case study of the S/V GREAT AMERICAN. The sailboat had been rolled in extremely heavy weather off the coast of Chile during a voyage from San Francisco to Boston. The prosecution of the case involved all the latest technologies including ARGOS and 406 Mhz EPIRB beacons, Inmarsat telephone, AMVER surpics and Vessel information from Lloyds, and telefaxes. Prompt action resulted in diverting the M/V NEW ZEALAND PACIFIC, which rescued the two people from the GREAT AMERICAN. Other case presentations included the Lockerbie/Pan Am bombing disaster presented by RCC Edinburgh, a 727 aircraft ditching case presented by RCC Halifax, two F/V sinking cases presented by MRCC Clyde, the sinking of the M/V IRVING FORREST by MRCC Falmouth, and a report on the fire/arson case involving the ferry SCANDANAVIAN STAR presented by RCC Stavanger. These cases stressed the importance of technological improvements, the lack of understanding of SAR procedures among merchant ships, and the requirement for international cooperation between RCCs.

CDR J. Frost from the Operations Computer Center and CDR H. Blaney from the National SAR School updated all the attendees on current Coast Guard initiatives concerning AMVER, CASP, and SAR training. Other presentations included updates concerning COSPAS/SARSAT presented by LCDR Paul Barger from Coast Guard Headquarters and Capt MacIntyre from the Canadian MCC. Mr. Quincy Robe from the Coast Guard R and D Center presented a briefing concerning the ongoing U.S./Canadian Severe Weather Visual and Electronic

Detection Project. The aim of the project is to improve search effectiveness from larger vessel search platforms, develop sweep width tables for large vessel search platforms, study the effectiveness of night vision goggles and radar detection, and to study the effects of color and size on search detection abilities. Both Canada and the U.K. have upgraded their RCC capabilities with computer enhancements. Capt. Penny from MRSC Newfoundland presented a briefing on the Canadian DATA HAIL/FLEET LOCATING system which is a reliable computer based communications system with enhanced graphical vessel positioning information. Mr. John Astbury from MRCC Falmouth England presented a briefing on the new British AUTOMATIC DATA ACTION SYSTEM which is a computer based, multi-terminal accessed SAR data base. The system allows all UK RCCs to access a common data base and provide communications and SAR case updates to the other RCCs.

In addition to the formal sessions, the conference participants were provided tours of the Atlantic Area Operations Center, VTS New York and Station New York. The conference ended Wednesday morning with a tour of the United Nations. MRCC Etel France has volunteered to host the 1993 conference.

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COMMON SENSE SAR

By: QM1 J.W. Rockefeller, U.S. Coast Guard Group Key West, FL

Flexibility and a real willingness to get the job done are often more important to the successful completion of the Coast Guard's search and rescue mission than the equipment we may or may not have available.

A good example of flexibility and a "CAN DO" attitude occurred this June 10th at Station Marathon, in the Florida Keys AOR of Coast Guard Group Key West.

The story began when a jogger on the famous Seven Mile Bridge called Station Marathon to report an 18 foot open runabout disabled and anchored approximately one half mile south of the bridge. The weather was pleasant with several hours of daylight remaining. Unfortunately, there were no communications with the distressed craft, and the weather in the Keys can turn nasty in short order. Indeed, squalls were reported in the area, and could be expected to be a factor. A Coast Guard response seemed appropriate.

The only problem was, that Station Marathon's available surface resource, the 41318, was already engaged in SAR, picking up five Cuban refugees from a homemade raft located twenty miles south of Sombrero Key lighthouse, some twenty-five miles away.

How do you respond when you apparently have no resources... when your UTB is underway, your two nonstandard boats are in "CHARLIE" status, and Auxiliary Resources are not readily available? The Station OOD, a BM3, decided he'd better THINK of something, and think quickly...and so it was "quickly" that an MK2 and a BM3 from the duty section were dispatched in the Station truck to evaluate the situation.

Once on scene, the Station personnel determined that commercial assistance was an appropriate response after all, and issued a MARB directly from the truck. Within fifty-five minutes a commercial salvor had responded and the case had been successfully resolved literally "under" the watchful eyes of the Station Marathon Petty Officers.

It won't work out quite so smoothly every time, of course, but this is a very good example of a case that was successfully prosecuted because a Station OOD refused to believe that because his "only resource" was previously engaged, there was nothing he could do.

COMMUNICATIONS BETWEEN SHIPS AND AIRCRAFT

BY: Dan Lemon, G-NRS-3

RCCs should always be able to facilitate efforts of civil ships and aircraft so one can assist the other. Ability to assist each other, however, is usually dependent upon ability to communicate with each other, which is easier said than done.

Assistance that aircraft can provide to ships in distress is covered in Chapter 5 of Annex 12 to the International Convention on Civil Aviation. Assistance from ships to aircraft in distress is discussed in Chapter 8 of the MERSAR Manual of the International Maritime Organization (IMO). Chapter 7 of Part 2 of the SAR Manual of the International Civil Aviation Organization (ICAO) discusses emergency intercept and escort services and ditching assistance; Appendix A of this document remarks on environmental information ships can provide for ditching aircraft, problems connected with aircraft ditching, and assistance ships can provide aircraft in distress. Mutual communications between ships and aircraft are discussed in Article 5.4 of Part 1 of the ICAO SAR Manual.

Although ships and aircraft have the potential to be of vital assistance to each other if a distress arises at sea, certain commercial air carriers, shipping companies and others in the United States have independently expressed their concern about lack of enabling common communications. This problem was also discussed at the Caribbean-South American Regional Air Navigation meeting in May 1989, where the meeting concluded that the need for aircraft-ship communications is obvious. Establishing communications between an aircraft and ship is difficult and time-consuming, if not impossible in some cases.

Amendment 68 to Annex 10 of the International Convention on Civil Aviation recommends carriage of equipment by civil aircraft to communicate on 4125 kHz. IMO recently noted that neither ships nor aircraft monitor this frequency, but that ships, though not required to carry 4125 kHz equipment, often do. Another frequency potentially common and suitable for short range air to sea use is 3023 kHz. It is possible for ships and aircraft to contact each other on one of these frequencies, but they need help. Therefore, IMO has recommended that the following procedure be followed in establishing ship-aircraft communications:

1. An aircraft in distress over an ocean area should in accordance with ICAO procedures advise the air traffic control (ATC) authority of the distress situation on the frequency being used for ATC purposes.

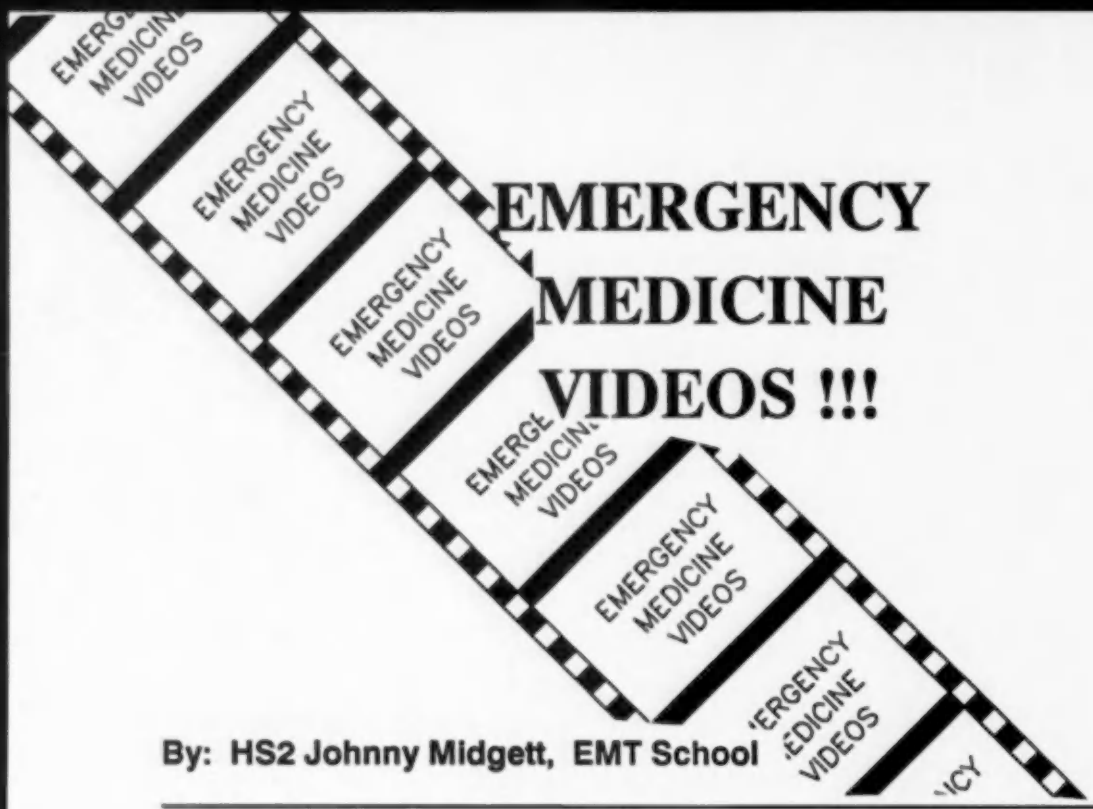
2. If ditching at sea is likely the ATC authority will immediately advise the appropriate Rescue Coordination Center (RCC). The RCC will advise the appropriate coast station or coast earth station which will alert ships which are in position to provide assistance.

3. When alerted by the coast station or coast earth station, ships will be requested to establish, if possible, a listening watch on the frequency 4125 kHz. If unable to use the frequency 4125 kHz ships will be requested to establish a watch on the frequency 3023 kHz.

4. The aircraft will initially attempt to establish communications on the frequency 4125 kHz and if this is not successful will then establish communications on 3023 kHz.

5. In the event that ditching becomes unnecessary, the aircraft will initiate notification to cancel the distress situation in accordance with the provisions of ICAO and the International Telecommunications Union (ITU).

While the above procedure is time-consuming, less than ideal, and certainly inadequate for dedicated SAR aircraft, it may be the only present alternative for civil aircraft. Emerging use of satellite communications by the aviation community, which is now well established in the maritime community, may afford the needed opportunity for better harmonization. os



EMERGENCY MEDICINE VIDEOS !!!

By: HS2 Johnny Midgett, EMT School

I'd like to tell you about a very valuable training resource that is available to you. We have a video library that is updated monthly, covering topics from basic first aid and airway management to disaster planning. Our videos can be used for up to ten hours of continuing medical education toward your 48 hour EMT recertification requirement. The videos can also be used as training aids for other station personnel.

To get a video, call me at **(707) 765-7526 or FTS 623-7526**. I'll mail it certified, insured for $200; please mail it back the same way. You can keep it for up to two weeks.

The current video list is below. To get an updated list, call me at the above number.

--- USCG EMT SCHOOL VIDEO LIBRARY LIST - JUL 91 ---

#1 **Kinematics:** *Energy and force related to physical trauma. Running time 19 minutes.*

#2 **Assessment of Trauma Pt:** *Techniques of primary and secondary survey. Running time 20 minutes.*

#3 **Violent Patient Mgmt:** *How to identify potential hazards in patient behavior. Running time 13 minutes.*

#7 **Say it Right:** *How to obtain a patient history. Running time 22 minutes.*

#10 **Abd. Trauma:** *Abdominal anatomy and kinematics of abdominal trauma. Running time 12 minutes.*

#17 **Special Comms. Part 1 & 2:** *Emotional aspects of an emergency and how they affect communications. Running time 33 minutes.*

#20 **Emergency Mgmt of Chest Injuries:** *Anatomy and physiology of the chest. Shows techniques of chest injury mgmt. Running time 18 minutes.*

#30 **Going into Shock:** *Defines shock, also how to recognize and treat for shock. Running time 17 minutes.*

#31 **Emergency Obstetrics:** *Procedures for assisting in normal deliveries. Running time 21 minutes.*

#32 **CPR for Rescues:** *BLS film designed to supplement CPR classes. Running time 30 minutes.*

#33 **Emergency:** *General first aid for common medical emergencies. Running time 60 minutes.*

#34 **Basic Airway Mgmt:** *Introductory level instruction on airway management for prehospital care providers. Running time 45 minutes.*

#35 **Basic Shock Mgmt:** *Practical approach to shock management for basic care providers. Running time 45 minutes.*

#36 **Advanced Airway Mgmt:** *Step by step demonstrations including EOA's, ETOA's, nasotracheal intubation, digital intubation. Running time 45 minutes.*

#37 **Advanced Shock Mgmt:** *Shock treatment involving IV's, fluid replacement and pharmacological treatments. Running time 45 minutes.*

--- Emergency Medical Update ---

MCI 88: *Chlorine fire, Building collapse, Bus accident, Commuter plane crash Haines AK, Propane explosion, Rocket fuel explosion, Delta crash TX, Tornado, School bus crash, Flight 225 crash.*

Nov 88: *(2) Combative pts, gunshot wounds, legal obligations.*

Dec 88: *(2) Louisville newspaper fire, head trauma intervention spinal immobilization.*

Jan 89: *(1) New York building collapse, airway mgmt., infection control.*

Feb 89: *(1) New Jersey bus accident, bus extrication, difficult moves.*

Mar 89: *(1) Stockton school shooting, CISD, fractured pelvis, refusal of care.*

Apr 89: *(2) EMT defibrillation, cardiac arrest, cardiac A & P, automated and semi-automated defibrillators.*

May 89: *(2) Tampa car accident, rapid extrication, kinematics, patient restraint.*

Jun 89: *(2) Disaster mgmt. & Planning I, pulmonary edema, pulse oximeter, supplemental ventilation.*

Jul 89: *(1) Disaster mgmt. & Planning II, penetrating chest wounds, A & P of penetrating chest wounds, abused patients.*

Aug 89: *(2) Atlanta high rise fire, industrial accident, clinical implications of common home medications.*

Sep 89: *(1) Abnormal mental states, psychiatric emergency, scene safety, the suicidal patient.*

Oct 89: *(2) Souix City plane crash, media relations, antihypertensives, product alert.*

Nov 89: *(2) Virginia train derailment, stress debriefing, causes of accidents, ambulance driving, emergency vehicle right of way.*

Dec 89: *(1) Normal child birth, A & P of pregnancy, child complications, neonatal resuscitations.*

Jan 90: *(1) Safe loading zone, epiglottitis, pediatric resp. disease, minor consent.*

Feb 90: *(1) South Carolina hurricane, hypothermia, mechanisms of heat exchange, treating suspected lawbreakers.*

Mar 90: *(1) California Earthquake, thermal burn, anatomy and physiology of the skin, gloves and hand washing.*

Apr 90: *(1) New York plane crash, abdominal aneurysm, A & P of internal bleeding.*

May 90:	*(1) Drugs on the job, substance abuse among co-workers, chemical dependency, common street drugs, community education.*
Jun 90:	*(1) Colorado bank explosion, crushing fractures, splinting.*
Jul 90:	*(1) Terrorism and EMS, infection protection, patient assessment, volunteers and good samaritan laws.*
Aug 90:	*(1) Ohio flooding, A & P of shock, bleeding & shock mgmt., PASG.*
Sep 90:	*(1) Airway obs. and mgmt., A & P of CPR, CPR, cleaning your mannequin, ceasing CPR.*
Oct 90:	*(1) Suspended vehicle extrication, geriatric hip fracture A & P,spinal immobilization, the law and family interference.*
Nov 90:	*(1) Washington multiple vehicle accident, slope rescue, hepatitis B vaccine.*
Dec 90:	*(1) Traumatic airway mgmt., spinal cord injury, air bag safety guidelines, AIDS related medications.*
Jan 91:	*(1) SIDS, SIDS resuscitation, airway mgmt., measles vaccine.*
Feb 91:	*(1) Common pediatric emergencies, pediatric respiratory emergencies, pediatric assessment (special concerns), intraosseous infusion, coping with families in crisis*
Mar 91:	*(1) Tennessee multiple vehicle accident, body substance isolation, BTLS assessment, poisoning, Doctor on scene.*
Apr 91:	*(1) Incident staging, tuberculosis, abd. trauma, helmet removal, bystander volunteers*
May 91:	*Hostage shooting, non A, non B hepatitis, airway obstruction, autopsy-abdomen, system abusers.*
Jun 91:	*Back care, Diseases of the nineties, Autopsy neck and chest, Radio reports, Documentation*
Jul 91:	*Hazmat readiness, herbicide poisoning, field stabilization, medical monitoring*

--- PULSE Videos by American Heat ---

Mar 89:	*(1) Stockton playground shooting, intraosseous infusion, Armenian earthquake.*
Sep 89:	*(1) Souix City Iowa, national ALS competition, Clincon.*
Dec 89:	*(1) San Francisco earthquake response.*

--- STREET MEDICINE ---

The Primary Survey - Techniques used

The Secondary Survey - Techniques used.

VESSEL SAFETY WITH Emergency Position Indicating Radio Beacons

By: LCDR G. D. Garrett, Seventh Coast Guard District

Do You...

Boat / Cruise / Sail / Fish / Work / Play Offshore?

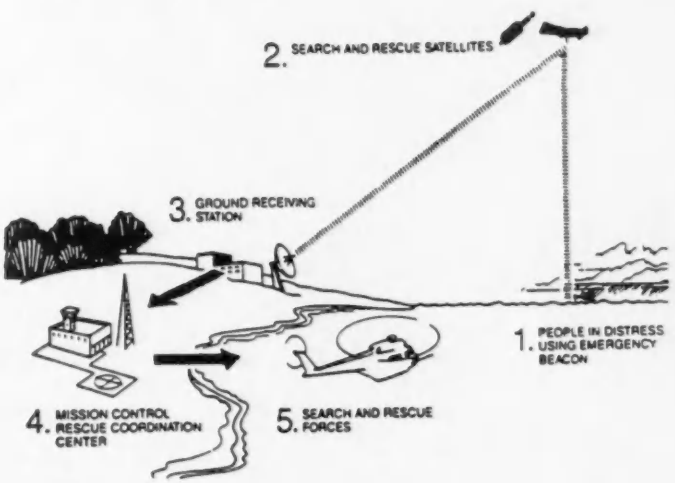
If so, then this is for you.

For as little as $150 you can acquire one of the most powerful distress communications devices in the history of marine safety, and possibly make the "life insurance" investment of a lifetime -- one that could save your life!!

First of all, what is an EPIRB?

An EPIRB is an emergency signaling device that **alerts** rescue forces to a distress situation, provides a **good** distress position, and transmits an electronic homing signal that helps rescue forces locate the vessel/persons in distress, once they arrive in the general distress position.

How do EPIRBs work?


2. SEARCH AND RESCUE SATELLITES
3. GROUND RECEIVING STATION
1. PEOPLE IN DISTRESS USING EMERGENCY BEACON
4. MISSION CONTROL RESCUE COORDINATION CENTER
5. SEARCH AND RESCUE FORCES

1. Persons in distress activate the beacon. (Some EPIRBs float free and activate automatically in the event of a sinking.)

2. The EPIRB's signal is copied by one or more polar orbiting Search and Rescue Satellites (SARSATs), usually within two hours of activation. As the satellite "sees" the beacon, it computes a distress position using doppler shift analysis, then relays the "alert" and position information to a Ground Receiving Station.

3. The Ground Receiving Station relays the signal to National Mission Control which routes the "alert" to the responsible Rescue Coordination Center, usually within 15 minutes of signal receipt.

4. The Rescue Coordination Center dispatches appropriate search and rescue forces to the "alert" position.

5. Once Search and Rescue Forces arrive in the general vicinity of the "alert" position, they are able to direction find (DF) on the beacon's homing signal. (Some EPIRBs are also equipped with strobes.) The alert position and homing signal enable Search and Rescue Forces to focus their visual, communications, and electronic search efforts in a relatively small area, maximizing the opportunity for timely rescue.

EPIRBs can take the search out of search and rescue.

Two recent cases provide a dramatic illustration of the critical difference an EPIRB can make.

FOR EXAMPLE ! ! !

CASE "A": WITH EPIRB

INITIAL REPORT:
9 MAY 91. 8:21 AM. Coast Guard Rescue Coordination Center (RCC) Miami received a 406 MHz EPIRB alert via the search and rescue satellite (SARSAT) system. The 406 "satellite" beacon first alert provided an accurate distress position, the name and description of the distressed vessel - PATRICIA ANN, a 36 foot fishing vessel, and the names and phone numbers of two shore side points of contact.

SITUATION:
F/V PATRICIA ANN in apparent distress 130 nautical miles (NM) northwest of Tampa.

WEATHER:
Seas: 6-8 FT. Winds: 15-20 KTS.

Visibility: 10 NM.

INITIAL POSITION UNCERTAINTY:
Alert position accurate to within 3 NM. Area less than 10 SQ NM.

CASE "B": WITHOUT EPIRB

INITIAL REPORT:
20 MAY 1991. 2:30 PM. Concerned family members reported an 18 FT outboard with four persons on board (three adults, one child), OVERDUE from a day fishing trip off Marco Island. The boat had departed Marco at about 7:00 AM on the 19th to return before dark. Their fishing destination was thought to be about 18-19 NM west of Marco Island, near two off shore towers. The boat was a recently acquired 1973 model runabout with a blue hull, blue bimini, and a history of engine problems.

SITUATION:
Apparent distress. Weather nasty and getting worse. Position and nature of distress unknown.

Position possibilities: The boat may have encountered difficulty en route fishing destination, at destination, or on return. Or the operator may have decided to fish elsewhere.

Nature-of-distress possibilities:
Disabled/adrift, disabled/anchored, capsized/adrift with persons in the water with the boat, or sunk with persons in the water.

WEATHER:
Seas: 5-7 FT. Winds: 15+ KTS.

Visibility: 4 NM at best. Near zero in extensive thunderstorm/squall activity.

INITIAL POSITION UNCERTAINTY:
As of the time of the initial report, the P/C was almost 20 hours overdue; the distress was potentially more than 30 hours old. Taking into account time, position, and target uncertainties together with the effects of wind and current, the initial search areas encompassed over 1000 SQ NM.

ACTION TAKEN:
8:38 AM RCC Miami called,shore side points of contact. Owner confirmed PATRICIA ANN was fishing near alert position. Owner reported no recent communications. Owner attempted communications without success.

8:49 AM RCC Miami launched Coast Guard Air Station Clearwater's ready rescue helo.

9:15 AM Rescue 1486 airborne en route distress position 110+ NM away. Aircrew acquired satellite beacon's 121.5 MHz homing signal almost immediately. Rescue 1486 overflew the signal source twice as indicated by helo direction finder's 180 degree needle swings.

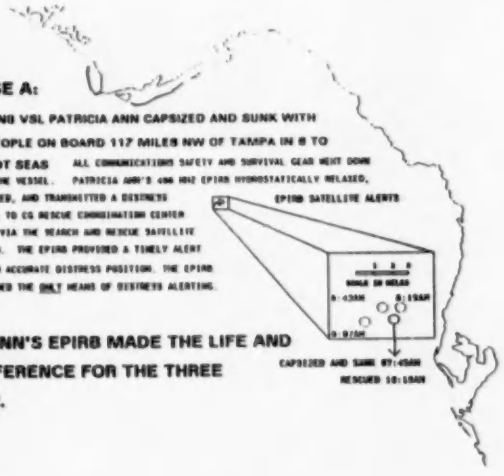
10:00 AM Rescue 1486 sighted two men clinging to a hatch cover in the 6-8 FT seas. Within minutes the helo crew spotted another man with a life-ring and the EPIRB.

10:15 AM Rescue 1486 safely hoisted all three crewmen.

11:10 AM Rescue 1486 safety delivered the three to CGAS Clearwater.

CASE A:

FISHING VSL PATRICIA ANN CAPSIZED AND SUNK WITH 03 PEOPLE ON BOARD 117 MILES NW OF TAMPA IN 8 TO 8 FOOT SEAS ALL COMMUNICATIONS SAFETY AND SURVIVAL GEAR WENT DOWN WITH THE VESSEL. PATRICIA ANN'S 406 MHZ EPIRB HYDROSTATICALLY RELEASED, SURFACED, AND TRANSMITTED A DISTRESS SIGNAL TO CG RESCUE COORDINATION CENTER MIAMI VIA THE SEARCH AND RESCUE SATELLITE SYSTEM. THE EPIRB PROVIDED A TIMELY ALERT AND AN ACCURATE DISTRESS POSITION. THE EPIRB PROVIDED THE ONLY MEANS OF DISTRESS ALERTING.



PATRICIA ANN'S EPIRB MADE THE LIFE AND DEATH DIFFERENCE FOR THE THREE MAN CREW.

DEBRIEF:
PATRICIA ANN's crew reported that the 36 FT F/V had taken a large wave over the

ACTION TAKEN:
20 MAY: A CG Air Station Miami Falcon jet (HU-25) CG Air Station Clearwater helo (H-3) and a CG Station Fort Myers utility boat searched over 1000 SQ NM before dark with no significant sightings.

Issued an Urgent Marine Information Broadcast alerting all area mariners to the situation.

21 MAY: Coast Guard C-130 and HU-25 fixed wing aircraft and H-3 and H-65 helos from CGASs Miami and Clearwater and a Navy H-3 helo from NAS Key West flew eighteen sorties covering 6000 SQ NM.

On scene weather:
Seas: 8-12 FT. Winds: 30+ KTS.
Extensive thunderstorms/squalls. Difficult search conditions, especially with blue, low contrast target.

Chances of detecting target:
Marginal. No significant sightings.

22 MAY: USAF and USCG C-130's and CG helo's flew 12 sorties covering 6,500 SQ NM.
Weather: Same as 21 MAY. No significant sightings.

23 MAY: USAF and USCG C-130's, CG Guardian jets and H-3 helo's flew eight sorties, planned to cover 6,500 SQ NM. Shortly before noon a CGAS Clearwater C-130 located the 18 FT outboard, disabled/adrift 90 NM west of Ft. Myers, over 100 NM from their reported fishing position. The USAF C-130 deployed two pararescuemen (PJs) to the disabled boat to determine the condition of the survivors. All four were in surprisingly good shape considering their ordeal. A CGAS Clearwater H-3 helo hoisted the survivors and delivered them safely to CGAS Clearwater where they were taken to a local hospital.

CASE B:

18 FT PLEASURE CRAFT WITH 4 PERSONS ONBOARD OVERDUE FROM A DAY FISHING TRIP OFF MARCO ISLAND

A DECISION TO VENTURE 100+ OFFSHORE DESPITE ENGINE TROUBLE, LACK OF COMMUNICATIONS AND SIGNALING GEAR, AND A FORECAST FOR DETERIORATING WEATHER SET THE STAGE FOR TRAGEDY. AN EXHAUSTIVE FOUR DAY SEARCH EFFORT RESULTED IN AN AGAINST THE ODDS RESCUE. THE PLEASURE CRAFT WAS LOCATED 100 MILES DOWN WIND, DOWN CURRENT.

DEBRIEF:
The boat would not start at the Marco Island ramp. The operator removed his

transom, capsized and sunk within seconds. Two men had to swim out of the pilothouse. There had been no opportunity to radio a MAYDAY. PATRICIA ANN's EPIRB went down with the boat, but hydrostatically released as the vessel sank. The beacon surfaced within yards of the crew. They were easily able to recover the beacon. They held onto the beacon and debris until rescued.
PATRICIA ANN capsized and sank at 7:45 AM. Rescue 1486 arrived on scene at 10:00 AM. The three men were in the water less than two and one half hours.

SAFETY/SURVIVAL EQUIPMENT:
COMMUNICATIONS: VHF Marine Radio
SIGNALING: EPIRB, Flares
SURVIVAL: PFDs.
NAVIGATION: Magnetic compass. Two LORAN receivers.

RESCUE RECAP:

ALERT: CG alerted via 406 EPIRB/SARSAT within less than 1 hour of incident. The capsizing/sinking occurred suddenly, there had been no opportunity to radio a MAYDAY.

POSITION: Distress position accurate to within 3 NM by EPIRB/SARSAT. Rescue helo proceeded directly to immediate distress vicinity.
SIGNALING/DETECTION: 406 "satellite" beacon's electronic homing signal and strobe enabled the rescue helo to quickly locate the survivors.

SURVIVAL: All survival gear went down with the boat. One life ring floated to the surface. The EPIRB's hydrostatic release operated properly, the beacon surfaced and began transmitting a distress signal.

RESCUE:
From CG notification to rescue:
1 hour, 54 minutes.
Capsize/sinking to rescue:
2 hours, 30 minutes.

RESOURCES: 1 CG H-3 helo sortie, 1.9 flight hours.

vehicle battery to jump start the boat engine. Once underway the operator proceeded about 20 NM due west, shut down the engine, anchored and fished. As the weather deteriorated, the youngest passenger became seasick. At midday the operator decided to head back in. But... The engine wouldn't start, and the VHF-FM marine radio was inoperative. Later a passing P/C promised to return and assist after fishing, but was not seen again. During the nights of 19 and 20 May the operator expended 10 of 12 flares on board, (5 meteors/5 hand held) signaling vessels in the distance. Two flares became wet/unusable. No vessel responded. The CG received no related flare sighting reports. The survivors reported seeing nine fixed wing search aircraft over the course of 20, 21, and 22 MAY.

SAFETY/SURVIVAL EQUIPMENT:
COMMUNICATIONS: VHF-FM Marine radio.
SIGNALING: 12 flares. 10 Expended.2 Unusable.
SURVIVAL: Life jackets, Spam, sardines, soda, water. Ring buoy.
NAVIGATION:Magnetic compass.

RESCUE RECAP:

ALERT:
CG alerted by concerned family. Notification almost 20 hours after boat due back to Marco, more than a full day after boat became disabled. Boat's VHF-FM radio was/became inoperable. Operator was unable to radio his situation. Flares were ineffective.

POSITION: Initial position uncertainty at time of CG notification encompassed over 1000 SQ NM.

SIGNALING/DETECTION: 30+ KNT winds and 8-12 FT seas seriously reduced search units ability to detect target. VHF radio - inoperable. Flares proved ineffective. Flares were spent to signal distant vessels. Flares were not used/available to signal search aircraft. Aside from the flares, the vessel virtually no signaling capability, visual or electronic. The survivors became totally dependent on search units to detect them visually under very difficult search conditions. The low/no contrast color scheme of the boat further aggravated the detection problem.

SURVIVAL: Adequate food and water proved valuable. Life jackets were worn and were of potentially critical value.

RESCUE:
CG notification to rescue: 69 hours.
Disabled/adrift to rescue: 97 hours.
Vessel drifted over 100 NM.

RESOURCES:
USCG/USAF/USN aircraft sorties.
More than 160 flight hours.

ESTIMATED
RESCUE COST: $6,500.

BOTTOM LINE: EPIRB'S SAVE LIVES. Despite sudden capsize/sinking well offshore in adverse weather, PATRICIA ANN's EPIRB (part of a complete safety / survival package) ensured a timely, efficient rescue.

A single rescue helo flew over 100 NM directly to the distress scene, searched briefly, located/ recovered survivors and delivered them safely ashore.

THREE LIVES SAVED.

THE LAW: The law requires EPIRB carriage for most U. S. commercial fishing vessels operating more than 3 NM offshore. The Commercial Fishing Vessel Safety Act of 1988 enhances F/V safety through comprehensive safety/survival equipment carriage requirements.

2 CG surface units.
Searched approximately 18,500 SQ NM.

ESTIMATED
RESCUE COST: $554,000.

BOTTOM LINE: Operator departed to fish 10+ NM offshore despite boat's history and immediate indication of engine problems, an adverse weather forecast, lack of reliable communications, and lack of signaling capabilities. Imprudence and unpreparedness turned what should have been a simple day fishing trip into a near tragedy.
At least two vessels - one F/V and one P/C sighted subject in apparent need of assistance but failed to render assistance. The F/V did subsequently report the sighting. All of us in the maritime community have to look out for one another. A "good samaritan" could have saved a great deal of suffering, anxiety and a lot of taxpayer dollars.
Despite the massive search undertaken, our overall probability of success was only about 40 percent. Four lives were saved, because we were persistent and lucky. We're not always lucky. Over the long haul you don't beat the odds.

THERE IS NO SUBSTITUTE FOR SAFETY PREPAREDNESS AND GOOD SEAMANSHIP.

THE LAW: There is no requirement for recreational vessels to carry an EPIRB

Federal requirements for recreational vessel safety equipment carriage are MINIMUM.

Two more quick cases to help make the point.

On 03 June, the Coast Guard received several 121.5 MHz EPIRB/ SARSAT alerts indicating a probable distress in the North Atlantic about 300 nautical miles south of Bermuda. A Coast Guard C-130 launched from Air Station Borinquen on the northwest coast of Puerto Rico and flew over 600 NM to the alert position, arriving at 9:56 PM local time. The aircraft was able to locate the distressed vessel -- a 30 foot sloop with one person onboard, dismasted, disabled, and adrift with few provisions -- **in darkness, within nine minutes** of arriving at the alert position. A cutter subsequently towed the crippled sloop to Bermuda.

On 26 May, a small pleasure craft radioed a VHF FM channel 16 MAYDAY, reporting the boat sinking fast, with six persons onboard, six miles off Anclote Key, near Tampa, Florida. An Air Station Clearwater helo launched and arrived on scene within twenty minutes of the MAYDAY call. The helo found six persons in the water, hanging onto a cooler lid -- a young man, his pregnant wife, an adult friend, and the couple's three children, ages three, two, and one. The operator's VHF MAYDAY call, made as the boat was sinking, made all the difference in this case.

What if the MAYDAY call been delayed even a few seconds? Flooding would have almost certainly shorted the battery. If it had, who would report them overdue? When? Was there a float plan? Would anyone be able to provide useful information to search planners? How much area would search units need to cover based on that information?

What would search units' chances be of finding six heads in the water somewhere in, say, a 10 SQNM area? A 100 SQNM area? A 500 SQNM area? In 2-4 foot seas? In 6-8 foot seas?

What kind of difference could an EPIRB make in this scenario?

Imagine yourself in a similar situation. It is late afternoon, you are clinging to a cooler, five miles offshore, in 4-6 foot seas, not having been able to radio a MAYDAY, knowing it may be hours before

you are reported overdue. You know that your float plan will require rescue forces to search at least 200 square nautical miles just for openers. Hours pass. Darkness comes. You see what is probably a search helo, apparently flying a pattern, creeping toward you. The aircraft seems to pass nearly overhead, but continues on through the darkness, as though you didn't exist. Somehow you make it through the night, dawn comes, and with it another search aircraft. You are exhausted, the aircraft passes about a half mile to the east and on the next leg a half mile to the west. You're beginning to have serious doubts about your future.

What about that EPIRB? What about that alerting, signaling, and survival gear?

Even worse, imagine yourself in the same situation, ten miles off Fort Lauderdale, where the Gulfstream could carry you more than 100 miles a day, literally exploding the search area to tens of thousands of square nautical miles over the course of just a few days.

When things begin to go wrong, Murphy seems to step in. Too often radios fail. Without a backup -- a handheld, or an EPIRB -- a simple single unit, position-and-nature-of-distress-known, open and closed Search and Rescue case, can become an intensive, multi-unit, multi-day, long-shot search effort.

Does it make sense to put all your alerting/position reporting/ signaling eggs in one basket?

Is there a more effective, more economical back up to your VHF-FM radio than an EPIRB? (Available for as little as $150.)

Is your life, the lives of your family, friends, or crew worth at least $150?

Is there a better marine safety "insurance" value?

I don't think so.

Presently most U.S. commercial fishing vessels and inspected commercial vessels are required to carry EPIRBs. EPIRB carriage requirements for other U.S. uninspected commercial vessels (tugs, six packs, research vessels, dredges) will be finalized this fall.

If you are a transoceanic sailor, sail the deep Caribbean, "live" offshore, or just want the "best" you may want to consider a 406MHz "satellite" beacon. 121.5 beacons were designed for detection by aircraft, before satellite availability. When satellites became available, technology was developed to accommodate the large number of existing 121.5 beacons, although the frequency was not well suited to the application. 121.5 beacon signals can be processed only when a satellite can "see" both the transmitting beacon and a ground station at the same time. The effective radius of a ground station is about 1800 NM. The Gulf of Mexico, the Atlantic off the southeast U. S. and much of the Caribbean are covered. Outside covered areas, you are dependent on passing high flying aircraft to detect and report your signal. New ground stations coming on line in Puerto Rico and Hawaii will significantly expand coverage. Because of the tremendous volume of "noise" on 121.5MHz, the vast majority of 121.5 first alerts are not distress related, and multiple alerts (over the course of three to six hours) and/or independent corroboration are necessary to dispatch search units.

406 MHz beacons were specifically designed for satellite system operation. 406 beacons afford global coverage. 406MHz is exclusively dedicated to this purpose by international agreement. The 406 beacon can "remember" your signal and send it to a ground station when one comes into view. 406 "first" alerts are evaluated as distress and warrant immediate response. Each 406MHz "satellite beacon" has a unique identifying code. Purchasers can voluntarily register vessel, communications, survival gear, shoreside point of contact, and other vital information. If registered, this data is printed out automatically when alert information is received at the cognizant Rescue Coordination Center.

FOR MORE INFORMATION:
PLEASURE CRAFT BOATING SAFETY
HOTLINE at 1 800 368 5647
SEVENTH COAST GUARD DISTRICT
BOATING SAFETY

305 536 5697
COMMANDER (b)
Seventh Coast Guard
District
909 SE First Ave Miami, FL 33131-3050

1990
SAR PLANNER OF THE YEAR AWARD WINNERS

By: LT Rich Schaefer, (G-NRS-1)

The inaugural presentation of the annual SAR Controller Awards took place as part of the National Search and Rescue School's 25th anniversary banquet on 1 August 1991. The Seventeenth District Operations Center was awarded the RCC Controller of the Year Award, and Group Port Angeles Operations Center was awarded the Group Controller of the Year Award. One representative of each team was present at the banquet to receive the award. A narrative of each of the award winning actions appears following this article.

The D17 team members sharing in the award were:

CAPT W. E. Wade
CDR R. D. Kacmarski
LT D. S. Bobalek
LTJG S. S. Beckerman
LTJG S. D. Hargis
LTJG D. S. Ranney
LTJG A. J. Shaw
QMC J. C. Baker
QM1 J. F. Germain
QM1 J. S. Roberts
QM1 J. P. McGowan.

The Group Port Angeles team members sharing in the award were:

QMC P. Lucas
QM1 R. Kohberger
RM1 G. Snodgrass
YN1 T. Brennan
PS1 J. Newton.

The two winners were selected from a field of fifteen nominees by a selection committee comprised of representatives from the Headquarters Search and Rescue Division, Headquarters Flagplot, and the National Search and Rescue School. The selection committee recommended that two awards be made annually, one for Group and one for District Controllers. The two selections were made accordingly. As may often be the case with these awards, this year the awards recognized team efforts.

This award recognizes those who, unlike the vessel and air crews involved with a SAR case, receive little public recognition for the significant role they play, day to day, in the preserving of life and property.

Our congratulations are extended to the winners.

Nominations for the calendar year 1991 awards are due in to Commandant (G-NRS) by 31 January 1992. We plan to make the presentations at the spring SAR conference, March/April 1992 time frame.

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RCC Controller of the Year Award
Seventeenth District Operations Center
Aircraft N45Q overdue

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On October 12, 1990 at 0755Z the Coast Guard received a report of an overdue aircraft N45Q on a Polar Bear Survey Flight out of Prudhoe Bay, Alaska. The aircraft, a twin engine Aero Commander with three persons onboard, had departed Prudhoe Bay at 2229Z on 11 October to gather data for an ongoing scientific survey of Polar Bears. They were due to return at 0359Z on 12 October with a fuel exhaustion time of 0530Z. The aircraft was to fly to the Southern ice edge, approximately 250 nautical miles Northwest of Prudhoe Bay and then begin tracking bears. The survey used radio collars to track the bears movements on the ice.

When checks at local airfields failed to locate the aircraft, a Coast Guard C-130 was launched. An aircraft owned by Alaska Helicopters was also dispatched and began searching. A second Coast Guard C-130 and several more civilian aircraft joined the search later that morning. Also on 12 October, a Coast Guard Searchmaster from District 17 Operations Center was sent to Barrow to coordinate the search. The searchmaster worked out of the North Slope Search and Rescue facilities and coordinated all resources that were involved in the search. From October 12 to 25 both Coast Guard and civilian aircraft combed the search area, covering 137,561 square miles visually and 168,500 square miles by radar. The majority of the searches were completed several hundred miles from the nearest landfall over the Beaufort Sea and Arctic Ocean. Coast Guard C-130's flew a total of 245.7 hours and searched 90.9 hours. Civilian aircraft added an additional 292.7 flight hours and 156.9 search hours. Daily searches generally involved three Coast Guard C-130's and four civilian aircraft. Night flare searches were completed using one Coast Guard C-130 and one civilian aircraft. A Canadian aircraft equipped with a side-looking aperture radar conducted several electronic searches of the area. The data from these searches was fed into a land-based computer that generated positions of possible targets. These areas were then searched by other aircraft.

Investigation revealed that the aircraft had two emergency locator transmitters (ELTs), survival suits, a liferaft and enough food to survive for two weeks. The ELT's and the aircraft's navigational equipment were checked five days prior to the flight and were in good condition at that time.

Flight Service Station (FSS) Anchorage had directed the aircraft to squawk on 1261 to pass flight information to FSS Whitehorse. The Air Force Regional Operational Control Center for NORAD compiled data reduction of squawked and radar flight information to determine the flight path and last known position of the aircraft. The U.S. Fish & Wildlife Service (USF&W) reviewed bear transponder data to locate concentrations of Polar Bears and possible aircraft destinations. A search of the missing pilot's hotel room located personal notes that revealed satellite plots of bear transponders and

circled bear positions which enabled the searchmaster to begin to limit the search areas. No ELT composites were ever picked up, however one first alert was generated in the area and the position was searched. The Soviets were notified of the search and their reconnaissance planes were questioned about the missing plane.

Three Coast Guard C-130's were staged out of Eilson AFB to ease logistical problems. USF&W contracted additional air resources for searching. These additional aircraft were given search areas and reported to the searchmaster just as the Coast Guard C-130's did.

At 0057Z on 25 October 1990 the case was suspended pending further developments. No trace of the aircraft or its passengers were ever located.

This case merited award due to the innovated use of a foward-based "searchmaster" handling and controlling various agency and civilian search assets, along with the use of numerous types of search technology.

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Group Controller of the Year Award

Group Port Angeles Operations Center

Multiple SAR Cases, 5 and 6 May 1990

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During opening day of the 1990 boating season, a large number of pleasure boaters and fishermen were attracted to the Strait of Juan de Fuca by beautiful weather. Early in the afternoon, a rapidly advancing cold front moved in, building winds over 50 knots and seas in excess of 12 feet.

Almost immediately PS1 James Newton, the duty SAR controller, was inundated with more than 20 radio distress calls and continuous telephone calls. Rescue units were quickly dispatched. YN1 Terrence Brennan, a qualified OOD, who was working in the PERSRU on his off-time, immediately assisted in prioritizing the numerous distress calls. As the workload increased still more, QMC Paul Lucas, QM1 Reed Kohberger, and RM1 Gary Snodgrass were called in from liberty to assist.

To handle the mass of information flowing into and out of the OPCEN, the team split up to handle individual duties such as plotting, incoming reports, SRU tracking and tasking, and message reports. The SAR team successfully tracked and coordinated responses to ten vessels having difficulties, and to more than fifteen pleasure craft that had been thrown up on the beach. This was a particularly challenging task as the team identified each vessel and confirmed the safety of each crew. The team coordinated a variety of rescue assets, such as the commercial tug MYRTLE FOSS, which was diverted to and towed a pleasure craft in danger of grounding. In response to a report of numerous persons trapped on a remote beach bordered by steep cliffs, the team coordinated search efforts with the local sheriff department's rescue team. Together with an HH-65A helo, the stranded persons were located and rescued. During the height of activity, the team directed helicopter crews to monitor the progress of the sailing vessel PANDA, which was in danger of capsizing. It later took a heavy roll and lost its mast, and its crew was hoisted to safety. By day's end two boats and their four occupants were confirmed missing along with the operator of a beached boat. The team prepared extensive search plans for night helo and boat searches. In all, they planned searches for thirteen aircraft and nine vessel sorties.

The speed with which this group formed into a cohesive SAR response team, despite the diversity of their backgrounds and training, is a tribute to each one of them. Their efforts were instrumental in saving 12 lives and over $70,000 worth of property.

STATION STAFFING STUDY IMPLEMENTATION

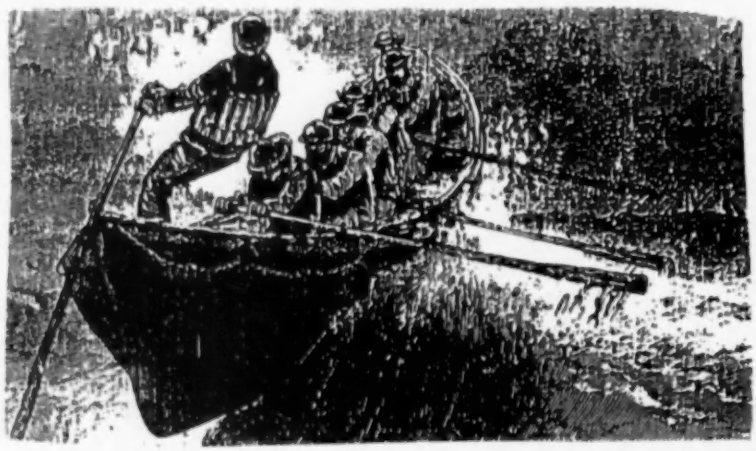
By: CAPT H. Gregory Ketchen, G-N-1

The Small Boat Station Staffing Study Final Report was distributed to the all stations and to group and district offices at the end of November. This study produced some outstanding recommendations targeted at easing the workload/staffing mismatch faced by small boat stations. It succeeded in creating a new awareness of the challenges and problems at these critical operational commands and on the quality of the services the Coast Guard provides. Station personnel were instrumental in assisting the study team understand and document station workload and support needs.

Several of the recommendations can, and will, be implemented within the next few months, others will need to be studied in more depth or tried and refined at selected prototype units before they can be broadly applied or used. Efforts will focus on continuous improvement in the quality of services provided to and by stations. The effect of many of the anticipated changes will not be limited to small boat stations, but should have a positive impact on most, if not all, Coast Guard operational commands.

This fall, the Coast Guard's top leadership was briefed on the findings and conclusions of this study and actions have already begun to implement several of the team's recommendations. In December, a special project staff (G-N-1) was formed within the Office of Navigation Safety and Waterway Services dedicated full time for the next two years to implementing the study's recommendations. CAPT Greg Ketchen (previously assigned to the Search and Rescue staff) has been selected to head this effort. His staff includes CDR Dick Tinsman (who was the study team leader), LCDR Gordy Garrett (from the Seventh District operations staff), LT Gwyn Johnson (from the Atlantic Area staff) and a BMCM with extensive station experience (an outstanding candidate has been tentatively identified). This staff will take the lead for Headquarters in coordinating the efforts of program managers, support staffs and operational commanders in acting on the study's recommendations.

Continued input and cooperation by those affecting or affected by station operations are critical to the success of any improvement efforts. Comments and suggestions regarding the study or its implementation efforts are both welcomed and encouraged. The Implementation Staff can be reached by phone (FTS 267-6712/2836), letters or handwritten notes (to Commandant (G-N-1) or FAX 267-4418), or Electronic Mail messages (to G-N-1/G-N).



Search & Rescue Division (G-NRS)

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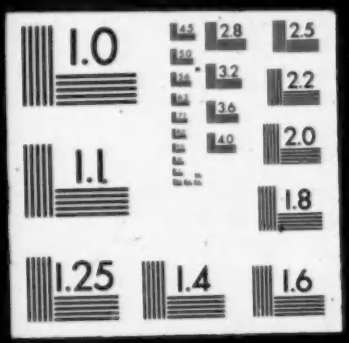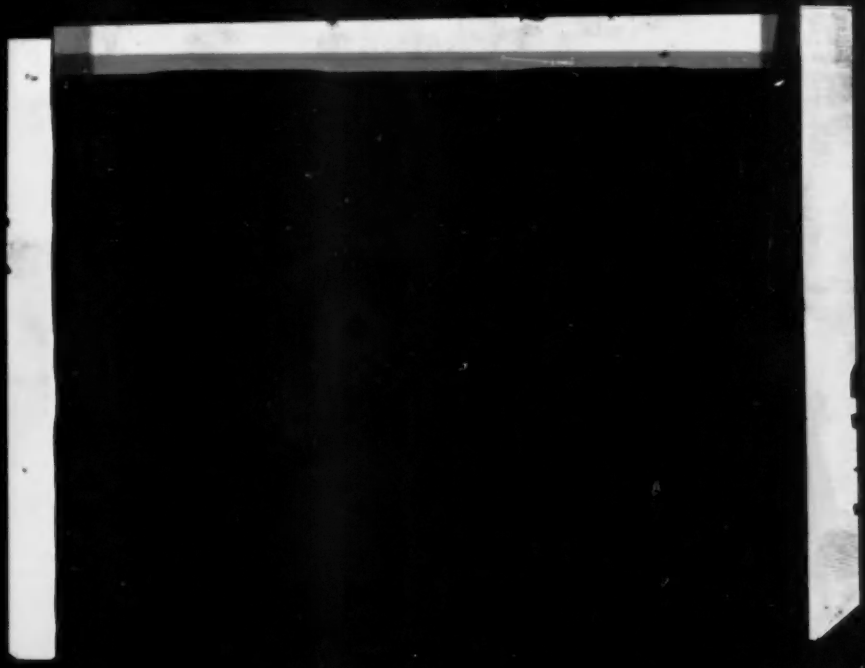
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